

**DIAMOND DRILLING REPORT  
ON THE JERSEY PROPERTY  
NELSON MINING DIVISION  
SALMO, B.C.  
NTS 82 F 03 E**

<p align="center"><b>SUP REORDER RECORDED</b></p> <p align="center"><b>JAN 22 1998</b></p> <p>M.R. # ..... \$ .....</p> <p align="center">VANCOUVER, B.C.</p>
---

**ON BEHALF OF  
SULTAN MINERALS INC.**

**BY**

**E.A. LAWRENCE, P. Eng**

**DECEMBER 1997**

<b>CLAIMS WORKED</b>			
<b>CLAIM NAMES</b>	<b>LOT NUMBER</b>	<b>CLAIM NAMES</b>	<b>LOT NUMBER</b>
SUNSHINE	L 9076	VICTOR FR.	L 14888
MORNING	L 9075	JERSEY	L 9070
KING ALFRED	L 3368	DODGER	L 12083
BRUCE FR.	L 14890	PICKWICK	L 12087
MARK TAPLEY	L 12117	KING SOLOMON	L 3369
REX FR.	L 14889	JERSEY 1	319025
POSIE	329070		

<b>LOCATION:</b>	49° 06' North Latitude 117° 13' West Longitude
<b>OWNERS:</b>	Lloyd Addie, Robert Bourdon Sultan Minerals Inc.
<b>OPERATOR:</b>	Sultan Minerals Inc.
<b>CONTRACTORS:</b>	Westgate Drilling P&L Geological Services E. A. Lawrence Consulting

25,349

**DIAMOND DRILLING REPORT  
ON THE JERSEY PROPERTY  
NELSON MINING DIVISION  
SALMO, B.C.**

**SUMMARY:**

The Jersey property includes the former Jersey and Emerald lead-zinc mines, and the Emerald, Dodger, Feeney and Invincible tungsten mines operated by Canadian Exploration (a wholly owned subsidiary of Placer Development – now Placer Dome) from 1947 to 1973. The property is located in south-eastern British Columbia approximately 10 kilometers south of the town of Salmo.

In 1993, Sultan Minerals Inc. acquired the property and undertook an exploration program that entailed ground and airborne geophysical surveys, prospecting and rock chip sampling. This work led to the identification of several targets that were believed to have potential for gold mineralization, which were followed up in 1994 and 1995 by surface drilling totalling 1324 meters.

Further work was carried out in 1996, with more soil sampling, geological mapping and research, prospecting, and surface and underground diamond drilling. An analysis of some of the large volume of historical plans and geological data acquired in the fall of 1996 resulted in the recognition of the potential of the area between the old Jersey lead-zinc mine and the underlying granite mass (the 'inter-zone'). This inter-zone has potential for lead-zinc in carbonates, (the Lower Jersey Horizon) and gold and tungsten and molybdenum in various distinct associations with intrusives. In addition, re-examination of drill hole logs from previous drilling along the eastern margin of the mine resulted in additional targets for gold exploration in the Bismuth gold zone.

This report covers the work done between 3 February 1997 and 31 October 1997 as follow up to the 1996 program. During this period 1215.5 metres of diamond drilling was carried out to test these new areas of potential. The eight holes that tested a portion of the proposed lower Jersey Horizon confirmed that this stratigraphic horizon is more structurally complex than anticipated, and that while lead-zinc mineralization exists, it is lower grade and narrower than the previous operation in the area tested.

Testing of the gold targets was carried out by drilling eight short holes totaling 228 metres. A new mode of occurrence was identified when sampling of old core returned significant gold in a siliceous cross-dyke setting. However, initial results suggest that continuity is limited in this association. Other holes tested pyrrhotite-pyrite targets. Further work on the various gold associations is needed to improve definition of targets.

Surface work at the south end of the Jersey was carried out in September, 1997. A review of old data, geologic mapping, trenching and the drilling of one hole, verified the concept that further potential exists for mineralization to the south of the old workings.

Drilling in the inter-zone, which was primarily to test the Lower Jersey Horizon, also confirmed that the geology is favorable for tungsten potential. Molybdenum mineralization was intersected in a leucocratic siliceous cross-dyke setting, which warrants further follow-up. No significant gold was found, but two holes revealed a siliceous cross-dyke system that is worthy of further study.

A follow-up geochem survey was carried out on an area of anomalous zinc values in the Wilson Creek area of the Posie group in late October. This work confirmed the previous anomaly, although values weren't as high.

## TABLE OF CONTENTS

TITLE PAGE . . . . .	i
SUMMARY . . . . .	ii
TABLE OF CONTENTS . . . . .	iv
LIST OF FIGURES AND TABLES . . . . .	v
INTRODUCTION . . . . .	1
LOCATION AND ACCESS . . . . .	3
TOPOGRAPHY, CLIMATE AND PHYSIOGRAPHY . . . . .	3
PROPERTY STATUS . . . . .	6
HISTORY AND PREVIOUS EXPLORATION . . . . .	8
GENERAL GEOLOGY . . . . .	9
ECONOMIC GEOLOGY . . . . .	13
<i>JERSEY LEAD-ZINC DEPOSIT</i> . . . . .	14
<i>TUNGSTEN DEPOSIT</i> . . . . .	14
<i>GOLD OCCURRENCES</i> . . . . .	14
DIAMOND DRILL PROGRAM . . . . .	15
DISCUSSION OF DRILL RESULTS . . . . .	17
<i>LOWER JERSEY HORIZON</i> . . . . .	17
<i>MOLYBDENUM</i> . . . . .	22
<i>TUNGSTEN</i> . . . . .	24
<i>GOLD OCCURRENCES</i> . . . . .	24
REHABILITATION AND SAMPLING of PRE-90'S CORE . . . . .	28
RESULTS FROM PREVIOUS CORE SAMPLING . . . . .	30
TRENCHING PROGRAM . . . . .	30
DISCUSSION OF TRENCHING RESULTS . . . . .	31
GEOCHEMICAL SURVEY . . . . .	31
CONCLUSIONS . . . . .	36
<i>LOWER JERSEY</i> . . . . .	36
<i>GOLD</i> . . . . .	36
<i>MoS<sub>2</sub></i> . . . . .	37
<i>TUNGSTEN</i> . . . . .	37
<i>GEOCHEM POSIE</i> . . . . .	37
REFERENCES . . . . .	38
STATEMENT OF QUALIFICATIONS . . . . .	39
COST STATEMENT . . . . .	40



LIST OF  
FIGURES AND TABLES

FIGURE 1	Location Map . . . . .	2
FIGURE 2	Claim Map . . . . .	4
FIGURE 3	Crown Grants and Topography . . . . .	7
FIGURE 4	Surface Geology Jersey Mine Area . . . . .	10
FIGURE 5	Idealized Intrusive Section . . . . .	12
FIGURE 6	Plan of Drill Holes LJu 97, 3-8 and Underground Workings . . . . .	pocket
FIGURE 7	6100N Section LJu 97 - 1,2 . . . . .	18
FIGURE 8	4875N Section LJu 97 - 3-5 . . . . .	19
FIGURE 9	4431N Area LJu 97-6. . . . .	21
FIGURE 10	5425N Area LJu 97 - 7,8 . . . . .	23
FIGURE 11	LJ 97-09 Vertical Section . . . . .	25
FIGURE 12	Drill Hole Location Plan . . . . .	26
FIGURE 13	Au 97-8 Section . . . . .	27
FIGURE 14	Core Storage Areas . . . . .	29
FIGURE 15	Trenching Program . . . . .	32
FIGURE 16	Posie Geochem Zn . . . . .	33
FIGURE 17	Posie Geochem Ag . . . . .	34
FIGURE 18	Posie Geochem Cu . . . . .	35
<hr/>		
TABLE I	List of Claims . . . . .	5
TABLE II	Diamond Drill Hole Information . . . . .	16
TABLE III	Core Storage Inventory . . . . .	42-49
APPENDIX A	Drill Logs	
APPENDIX B	Assay Certificates	

**DIAMOND DRILLING REPORT  
ON THE  
JERSEY PROPERTY  
NELSON MINING DIVISION  
SALMO, B.C.**

## **1.0 INTRODUCTION**

The Jersey Property is located in the West Kootenays of south-eastern British Columbia. It encompasses the former Jersey and Emerald lead-zinc mines and the Emerald, Feeney, Dodger and Invincible tungsten mines operated by Canadian Exploration (a subsidiary of Placer Development) from 1947 to 1973.

In 1993, Sultan Minerals Inc. acquired the property and undertook an exploration program that entailed ground and airborne geophysical surveys, prospecting and rock chip sampling. This work led to the identification of several targets that are believed to have potential for important gold mineralization. These were tested in 1994, 1995 and 1996 by diamond drilling. Also in 1996, geochemical sampling, prospecting, geologic mapping and research on geologic data existing from the previous mine operation resulted in additional areas of potential being delineated.

Potential for this property lies in four different types of mineralization. The lead-zinc and tungsten types have been mined in the past. The gold type and the molybdenum type, have been identified, but no production has yet occurred.

The 1997 diamond drilling program was primarily to test for further lead-zinc in the newly conceived 'Lower Jersey Horizon'. However, because these holes penetrated the 'inter-zone' (under the old lead-zinc workings and above the intrusives), they also added significant information on the gold, tungsten, and molybdenum environment in this area. As this was only a preliminary program, a relatively small area was tested.

Testing of additional gold targets in the northern and eastern area of the existing workings was also carried out. In the latter part of September additional work was done to test and to gather more data on the Lower Jersey Horizon at the southern end of the old operation. This consisted of one vertical ddh which followed up on results from a hole drilled in 1995. The 1997 hole confirmed the existence of the favorable horizon, but the grade of mineralization was weak.

Trenching was carried out to confirm the location and attitude of the 'black argillite' contact which usually defines the eastern limit of potential in this area. Results from this work confirmed the theory that the strata here are dipping steeper than the surface,

SULTAN MINERALS INC.

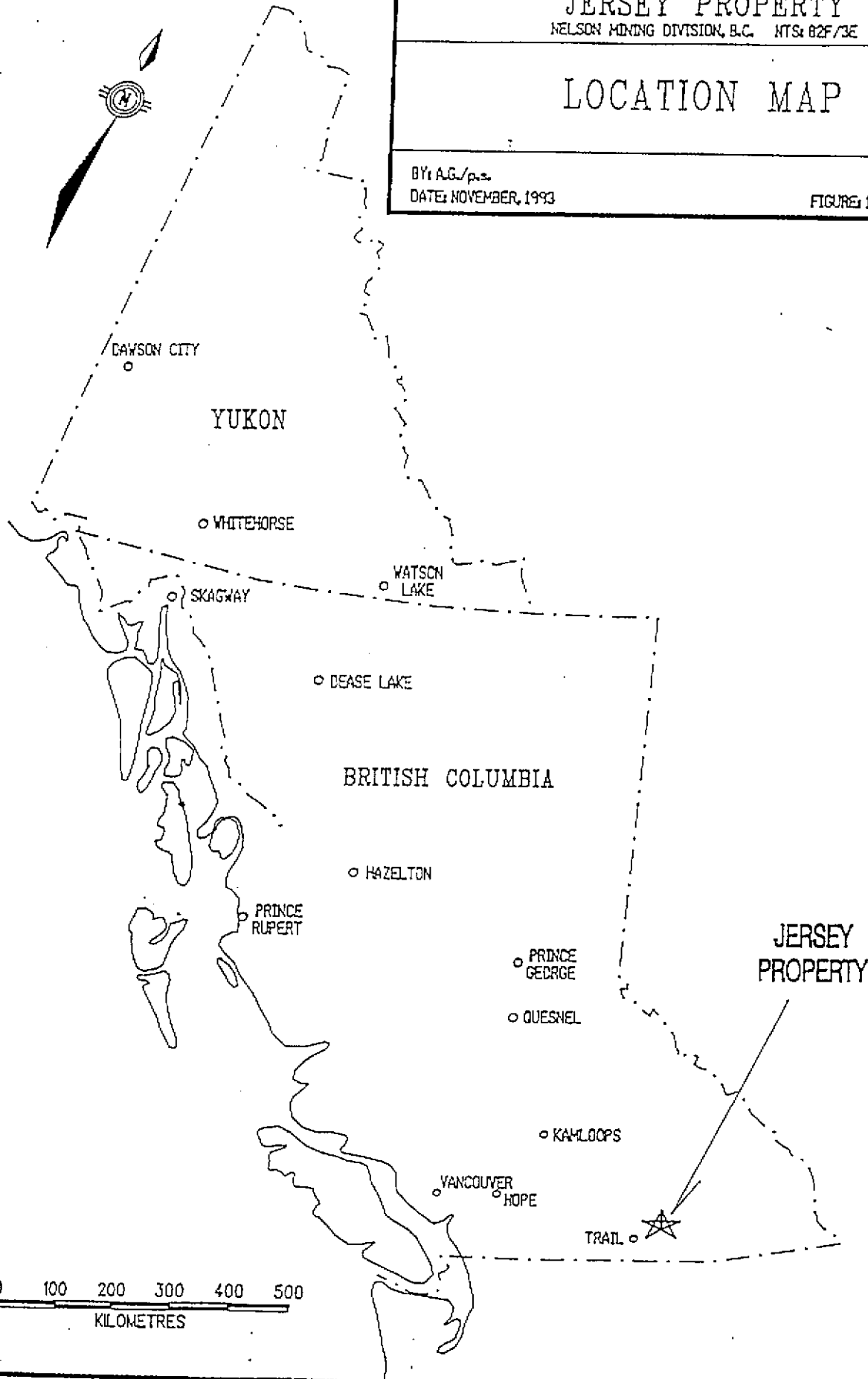
JERSEY PROPERTY

NELSON MINING DIVISION, B.C. NTS: 82F/3E

LOCATION MAP

BY: A.G./p.s.  
DATE: NOVEMBER, 1993

FIGURE 1



and therefore have not been eroded as deeply as previously thought. This improves the likelihood that zinc mineralization could be found immediately south of the Jersey mine.

Sampling of two areas on surface where easily recoverable zinc reserves are known to exist, was also completed. One area consists of already broken material, and the other is ready for mining. One other area, an old dump dating to the 1920's, should be sampled when weather permits next spring.

An anomalous occurrence of gold in limestone, found on the Blue Jay #6 MC, was examined. No further work is recommended on this showing.

A high zinc geochem anomaly - up to 4500 ppm - located on the Posie group on Lines 51+00N and 52+00N, was followed up with two short fill-in lines. The recent values were lower than the original ones, but still high, in the 1500 to 2000ppm range. More work is warranted to evaluate this area.

## **1.1 LOCATION AND ACCESS:**

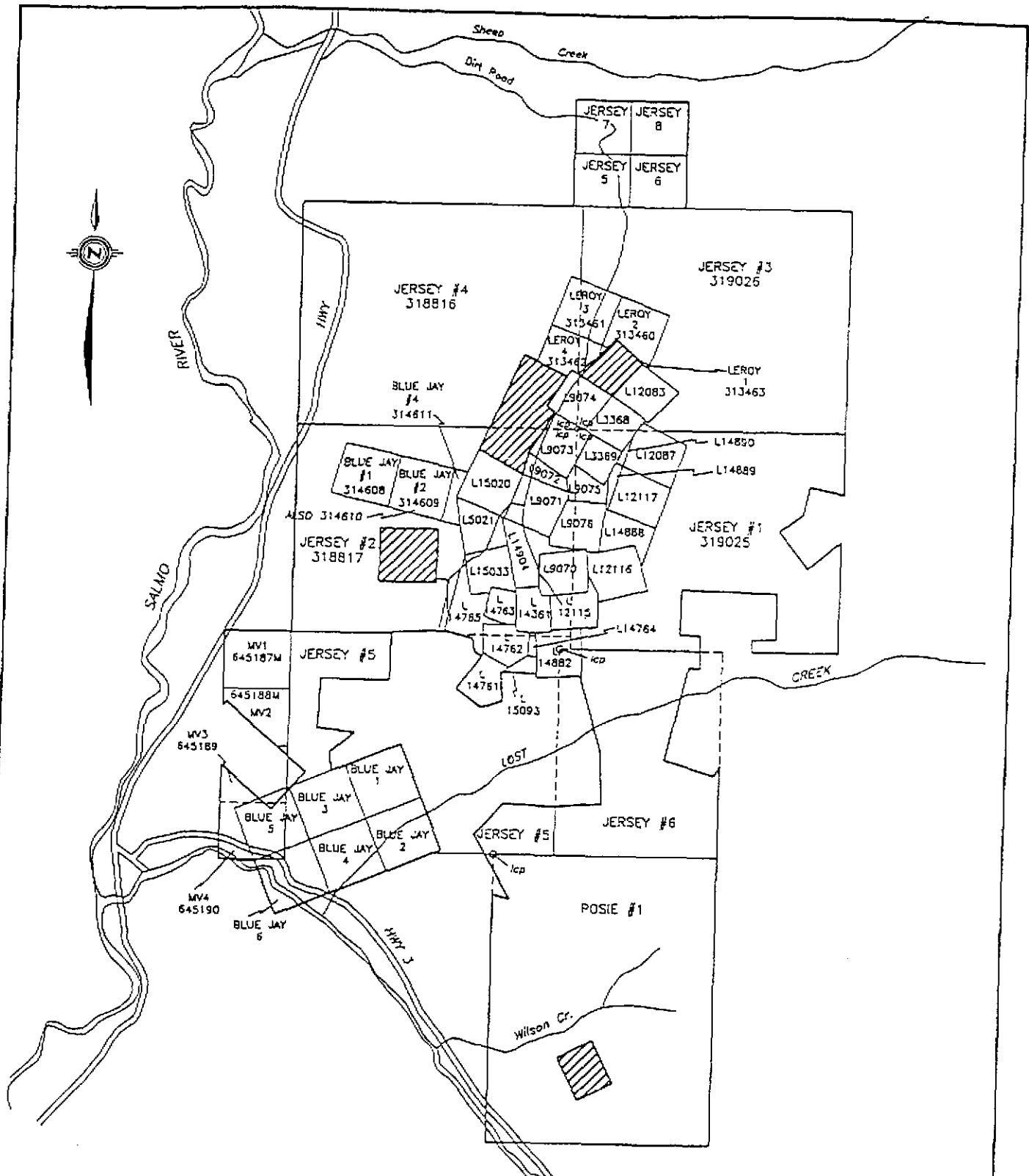
The property is located in south-eastern British Columbia at 49° 06'N, 117° 13'W (NTS 82 F/3E), 10 kilometers south-east of the community of Salmo (Figure 1). The claims cover an area of approximately 4000 hectares between the Salmo River on the west and the top of Nevada Mountain on the east, and are bounded on the north by Sheep Creek and on the south by the south fork of the Salmo River. (Figure 2).

The property is accessible via Highway 6 between Salmo and the Highway 3 turn off to Creston. A network of good quality gravel mine roads provide excellent access to the center of the property from Hwy 6 which is situated along the west edge of the property.

## **1.2 TOPOGRAPHY, CLIMATE, AND PHYSIOGRAPHY:**

The property area is situated in a rugged mountainous physiographic division known as the Selkirk Mountains. In the vicinity of the claim relief is on the order of 4,000 feet between the floor of Salmo River at 2,000 feet and the crest of Nevada Mountain at 6,100 feet. Slopes vary from flat and rolling over the center of the claims to moderately steep along the east and west margins.

Much of the area has been logged or burned previously and vegetation now consists of small diameter stands of larch, balsam, fir, jackpine and mountain alder. In many areas second growth vegetation is extremely dense making movement through the forest difficult. Several areas of extensive outcrop occur over and immediately north of the Jersey mine site but most of the property is covered by a veneer of glacial till. Till cover varies in thickness from 1 to 2 metres on the slopes to more than 20 metres in valley bottoms.



0 1000 2000  
 Scale 1:50,000

SULTAN MINERALS INC.	
JERSEY PROPERTY NELSON MINING DIVISION, B.C.	
CLAIM MAP	
DATE: BY:	FIGURE:2

TABLE I

## CROWN GRANTED MINERAL CLAIMS

CLAIM NAME	LOT NUMBER	CLAIM NAME	LOT NUMBER
MASTADON	1070	T.K. #1 FR.	14766
NELLIE J	1071	HILLSIDE	14881
KING ALFRED	3368	BIG DICK	14881
KING SOLOMON	3369	VICTOR FR.	14888
JERSEY	9070	REN FR.	14889
GOLD STANDARD	9071	COPPERFIELD	14890
STANDARD FR.	9072	HAL NO. 1	15020
EMERAL	9073	HAL NO. 2	15021
EMERALD FR.	9074	SUNSHINE NO. 2	15033
MORNING	9075	DEN FR.	15040
SUNSHINE	9076	DEN #1 FR.	15041
DODGER	12083	ALFIE	15091
PICKWICK	12087	TUNGSTEN KING	15092
ROYAL CANADIAN	12115	TUNGSTEN KING #2	15093
LAST CHANCE	12116	TUNGSTEN KING #1	15094
MARK TAPLEY	12117	TUNGSTEN KING #3	15095
BONCHEER	12686	TUNGSTEN KING #4	15096
JUMBO 2	12688	TUNGSTEN KING #5	15097
COMET	14761	TUNGSTEN KING #7	15098
CONTRACT	14762	T.K. #8 FR.	15099
CALCITE	14763	LF 9	15696
STAN FR.	14764	LF 10	15697
SCOTT FR.	14765	LF 11	15698

## LOCATED MINERAL CLAIMS

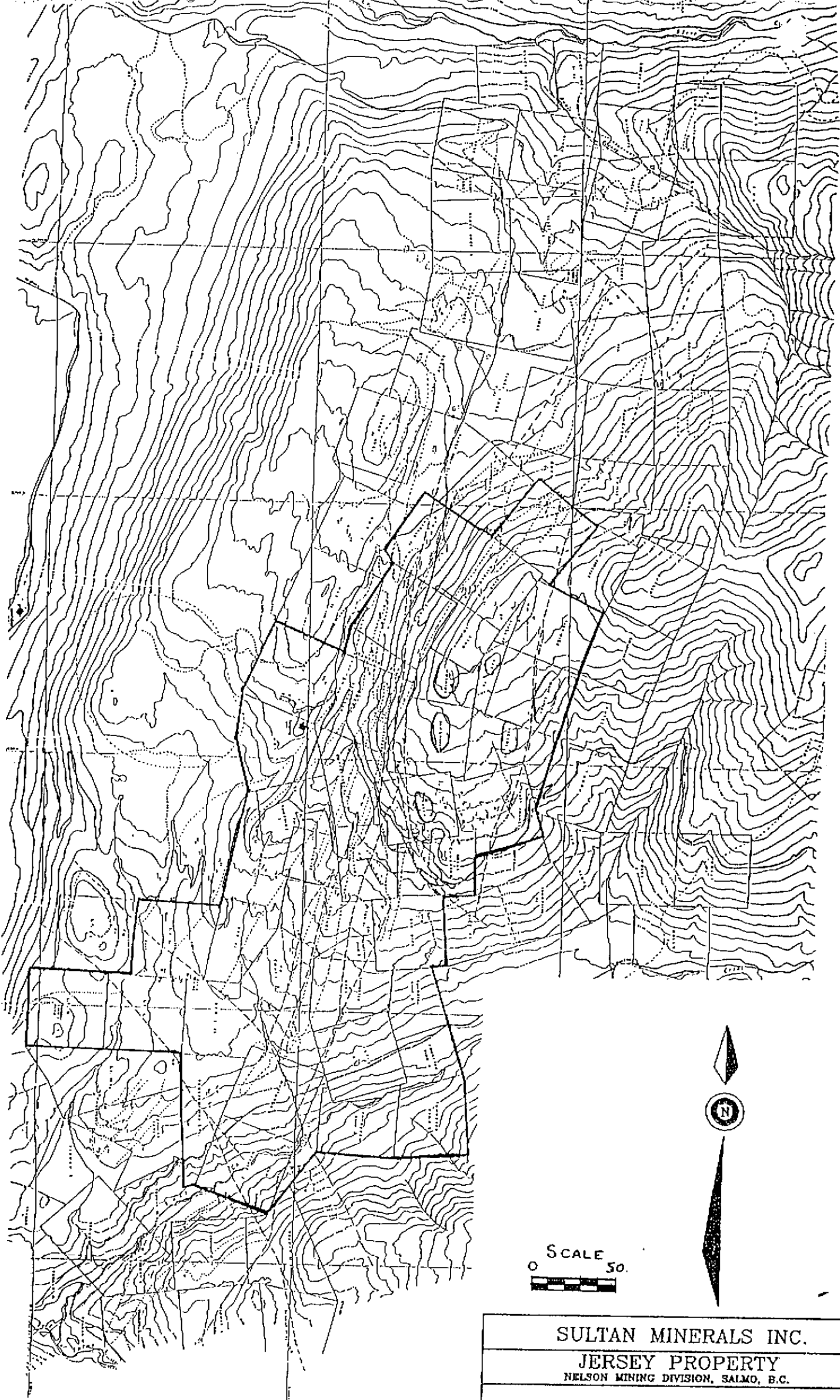
CLAIM NAME	TENURE	UNITS	ANNIV.	CLAIM NAME	TENURE	UNITS	ANNIV.
BLUE JAY 1	322324	1	OCT 24 07				
BLUE JAY 2	322325	1	OCT 24 07				
BLUE JAY 3	322326	1	OCT 24 07				
BLUE JAY 4	322327	1	OCT 24 07				
BLUE JAY 5	322328	1	NOV 07 07	LEROY 05	322859	1	NOV 20 07
BLUE JAY 6	322329	1	OCT 24 07	LEROY 06	322860	1	NOV 20 07
JERSEY 1	319025	20	JUN 23 07	LEROY 07	322861	1	NOV 20 07
JERSEY 2	318817	20	JUN 14 07	LEROY 08	322876	1	NOV 20 07
JERSEY 3	319026	20	JUN 23 07	LEROY 09	330364	1	AUG 28 07
JERSEY 4	318816	20	JUN 13 07	LEROY 10	330365	1	AUG 28 07
JERSEY 5	325269	20	APR 24 07				
JERSEY 6	325270	12	MAY 01 07				
JERSEY 7	342202	20	NOV 22 07	MV 1	32529	1	APR 23 07
JERSEY 8	342203	16	NOV 22 07	MV 2	325260	1	APR 23 07
JERSEY 9	348180	16	JUL 12 07	MV 3	325261	1	APR 23 07
JERSEY 10	348181	20	JUL 17 07	MV 4	325262	1	APR 24 07
JERSEY 11	348182	20	JUL 17 07	SUMMIT	233462	1	SEP 22 07
JERSEY 12	348183	18	JUL 16 07	SUMMIT 1	347849	1	JUN 30 07
JERSEY 13	349901	18	AUG 23 07	SUMMIT 2	347850	1	JUN 30 07
JERSEY 14	349902	18	AUG 23 07	SUMMIT 3	347851	1	JUN 30 07
LEROY N 1	330366	1	AUG 21 08	SUMMIT 4	347852	1	JUN 30 07
LEROY N 2	330367	1	AUG 21 08	POSIE 1	329070	20	JUL 25 08
LEROY N 3	330368	1	AUG 21 08	GULLY	331986	1	OCT 12 07
LEROY N 4	330368	1	AUG 21 08	HANGOVER	331985	1	OCT 12 07
LEROY N 5	330370	1	AUG 21 08	LOST GOLD	324439	9	MAR 19 07
LEROY N 6	330371	1	AUG 21 08	J 11	348178	1	JUL 13 07
LEROY N 7	330372	1	AUG 21 08	J 12	348179	1	JUL 13 07
LEROY N 8	330373	1	AUG 21 08	J 14	349449	1	AUG 5 07
J 1	348168	1	JUL 18 05	J 15	349451	1	AUG 5 07
J 2	348169	1	JUL 18 05	J 16	349452	1	AUG 5 07
J 3	348170	1	JUL 18 05	J 17	349453	1	AUG 5 07
J 4	348171	1	JUL 18 05	J 18	349903	1	AUG 20 07
J 5	348172	1	JUL 18 05	J 19	349904	1	AUG 20 07
J 6	348173	1	JUL 13 07	J 20	349905	1	AUG 20 07
J 7	348174	1	JUL 13 07	J 21	349906	1	AUG 20 07
J 8	348175	1	JUL 13 07	J 22	349907	1	AUG 20 07
J 9	348176	1	JUL 13 07	J 23	349908	1	AUG 20 07
J 10	348176	1	JUL 13 07				

(see Figures 2 and 3)

Salmo enjoys a pleasant summer climate with August temperatures averaging 25° C and moderate precipitation. Winter temperatures average -10° C in January with moderate snowfall. Total annual precipitation is on the order of 750mm of moisture with much of this falling during the rainy season from April to June. The property is in a heavy snow belt and up to four feet or more can be expected at the site during the winter months. Snow free conditions can be expected from early April to late November.

### **1.3 PROPERTY STATUS:**

The property currently consists of a block of 47 crown granted, 60 two-post, and 15 four-post (278 units) mineral claims, comprising approximately 4,000 hectares in the Nelson Mining Division. The claims, tenure numbers, number of units, and anniversary dates are listed in Table I.



SCALE  
0 50



SULTAN MINERALS INC.	
JERSEY PROPERTY NELSON MINING DIVISION, SALMO, B.C.	
CROWN GRANTED MINERAL CLAIMS	
BY :	FIGURE : 3
DATE : 1997	



#### 1.4 HISTORY AND PREVIOUS EXPLORATION:

The earliest record of exploration in the area dates to 1895 when gossanous areas on the south side of Iron Mountain attracted the attention of prospectors. The area was initially explored for gold and the 1896 Ministry of Mines Report states that assays as high as \$70.00 per ton in gold (about 3.5 oz/t) were obtained from the area.

Prospecting continued and in 1906 lead mineralization was discovered on the Emerald claims. Several small, high-grade ore shipments were made and in 1910 Iron Mountain Ltd. was formed by Pacific Coast Steel of San Francisco to develop the property. A 25 ton mill was erected in 1919 and operated until 1926 when low metal prices forced closure. In 1934 the mill was destroyed by a major forest fire.

During the second world war, tungsten and molybdenite mineralization was discovered in skarn beds on the Emerald, Emerald Fraction and Gold Standard claims. In 1942 the Emerald Tungsten Mine was put into production for the war effort by Wartime Metals Corp., a Federal Government Agency. Operations were suspended in 1943 when the war demand for tungsten eased.

The property remained inactive until 1947 when Canadian Exploration Ltd. (a subsidiary of Placer Development) purchased the property from Iron Mountain Ltd. Tungsten production resumed until 1949, when the mill was converted to lead-zinc. In 1951, with the Korean War in progress, the Government of Canada once again initiated tungsten production, this time from a new mill constructed close to the Emerald Mine. In 1952, Canex purchased this mill from the government and from that point on there was no further involvement by the government. This phase of the tungsten operation terminated in 1958, but the Jersey lead-zinc mine continued until 1970. When tungsten prices rose again in the late sixties, it was decided to develop the Invincible deposit. While planning was underway for this project, tungsten was accidentally located east of the Jersey Mine while diamond drilling for lead-zinc. This new tungsten deposit was named the East Dodger and was mined at the same time as the Invincible. Both operations closed in September, 1973 when a combination of low metal prices and B.C. government policy (the 'Super Royalty') made the mine uneconomical. Production for the period from 1906 to 1973 totaled 7,968,080 tons of 1.95% lead and 3.83% zinc; and 1,597,802 tons of 0.76% WO<sub>3</sub>. Also contained within the lead-zinc concentrate was about 1,000,000 ounces of silver and 5,000,000 pounds of cadmium.

In 1979 - 1980, Mentor Exploration Ltd. (a subsidiary of Agnico-Eagle) carried out a diamond drill program to explore the south extension of the Emerald Shaft tungsten zone. This work confirmed that the geology was favorable, but the depth (427m, 1400ft), combined with hole deviation, made it impractical to adequately test the narrow target zone (11 - 13 m in horizontal width).

In 1981, Mentor carried out a five hole diamond drill program totaling 1070 metres, to test for MoS<sub>2</sub> along the Emerald stock from 6300N to 7900N, and 6000E and 6800E. No commercial values were found.

In 1990 Placer Dome sold the property to Nu-Dawn Resources Inc. who in 1993 sold it to the present owners, Lloyd Addie and Bob Bourdon, both of Nelson, B.C.

In 1993 the present owners carried out a prospecting and litho-geochemical sampling program which led to the discovery of significant bedrock gold values in the vicinity of the Jersey and Emerald zones.

In 1993, Sultan Minerals Inc. acquired the property and undertook an exploration program that entailed ground and airborne geophysical surveys, prospecting and rock chip sampling. This work led to the identification of several targets that were believed to have potential for gold mineralization, which were followed up in 1994 and 1995 by surface drilling totaling 1324 metres.

Further work was carried out in 1996, with more soil sampling, geological mapping and research, prospecting, and surface and underground diamond drilling. An analysis of some of the large volume of historical plans and geological data acquired in the fall of 1996 resulted in the recognition of the potential of the area between the old Jersey lead-zinc mine and the underlying granite mass (the 'inter-zone'). This inter-zone has potential for lead-zinc in carbonates, (the Lower Jersey Horizon) and gold and tungsten and molybdenum in various distinct associations with intrusives. In addition, re-examination of drill hole logs from previous drilling along the eastern margin of the mine resulted in additional targets for gold exploration in the Bismuth gold zone.

## **2.0 GENERAL GEOLOGY:**

The Jersey property lies near the south end of the Kootenay Arc, a narrow arcuate tectonic belt of Palaeozoic miogeosynclinal and transitional rocks. To the east, these rocks are infolded with clastic and minor volcanic rocks of Late Proterozoic age, while to the west they are in complex structural contact with Upper Palaeozoic and Mesozoic eugeosynclinal argillites and volcanics.

The property is underlain by rocks of the Emerald, Reeves and Truman members of the Laib formation. The Emerald member is a thick sequence of black argillite; the Reeves is mostly limestone, but also has significant dolomite areas; the Truman member is mostly brown foliated argillite (sometimes altered to a diopside-garnet-vesuvianite skarn); and occasional beds of brownish white limestone. (See Figure 4)

The above rocks are underlain by, and intruded by granitics of the Nelson batholith. These intrusives within the property have been classified into five units based on work carried out by the author in 1981.



**LEGEND**

- Areas of little or no outcrop
- 6 Granite
- ACTIVE FORMATION
- 9 Black argillite
- LAIB FORMATION
- 7 Upper Laib : green, grey, and brown phyllite
- 6 Emerald member : black argillite
- 5 Reeves member : limestone
- 5a dolomite
- 4 Truman member : brown argillite, skamy, argillite, siliceous argillite, minor skam, and limestone
- 8 Mainly skam
- RENO FORMATION
- 3 Brown micaceous and grey blacky quartzite
- QUARTSITE RANGE FORMATION
- Navada Member
- 2b Upper - white quartzite

**SULTAN MINERALS INC.**

**JERSEY PROPERTY**  
NELSON MINING DIVISION, SALMO, B.C.

**SURFACE GEOLOGY**

BY : B.C. DEPT OF MINES  
DATE : 1957

FIGURE : 4

The youngest is lamprophyre, and although a number of distinctions are evident such as grain size and composition, all are classified within the one broad unit for this work.

Four 'granite' units have been identified to date. From youngest to oldest (preliminary postulation), these are:

- 1) aplite: aplite-porphyny
- 2) alaskite
- 3) medium grained granite
- 4) coarse grained granite.

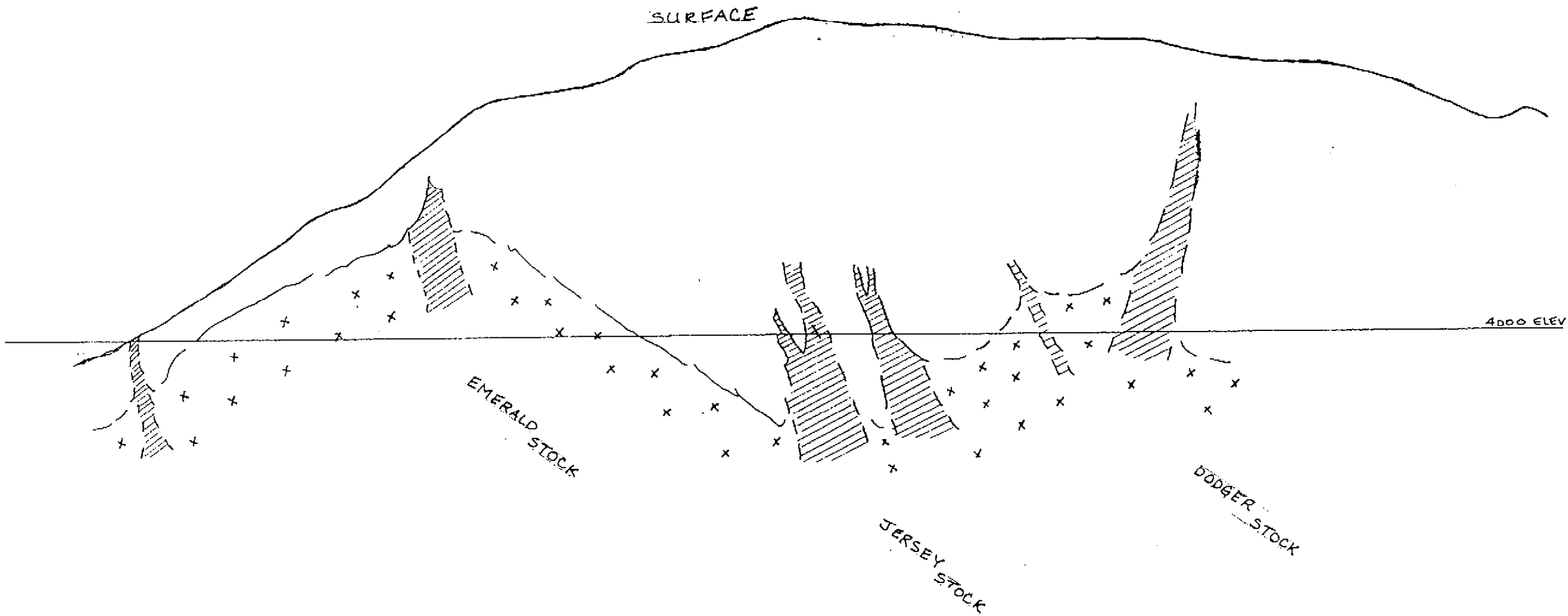
More data collection by mapping contacts on surface and underground is needed to confirm this. Also, "Unit 2" can probably be further divided as more information (microscopic work) is collected.

The main distinction between the coarse grained and medium grained granite is the 3-5mm quartz grains that constitute about 20% of the coarse grained variety. Another visual feature distinguishing them, is that the medium grained unit has less mafics and tends to be lighter coloured.

The coarse grained unit is found mostly on northern surface exposures of both the Emerald and Dodger stocks. It may also exist in the North Invincible underground workings, but this cannot be confirmed due to inaccessibility. No coarse grained granite has been found in the Dodger 4200 access drifts. The medium grained unit is found most extensively along parts of the Dodger 4200 access drifts and the upper part of the Invincible decline.

In a general sense, the form of the granitic intrusives can be described as a northerly-trending mass with a high point located on the north slope of Iron Mountain at about 10 000N (Mine grid). (Fig. 4) From there it slopes steeply toward Sheep Creek, a vertical drop of at least 670m (2200ft) in 2575m horizontal distance. No surface exposures have been found between this point and the HB Mine. No granitic intrusives are found on the HB Mine workings. Drilling results under the HB Mine are not immediately available, but based on verbal communication with the late George Warning, former mine geologist at the HB Mine, granitics were not found close to the mine workings. To the south the slope is flatter, dropping 600m in 3600m horizontal distance. The west and east limits of this mass are formed by vertical protrusions known as the Emerald and Dodger stocks. They are later protrusions on the upper surface, that tend to broaden with depth. For example, the Dodger stock is well exposed in underground workings, yet only outcrops on the north slope toward Sheep Creek, where it has been exposed by erosion.

The recently located Jersey stock is not exposed on surface, but is evident in the Dodger 4200 crosscut and in drill holes. The surface drill hole completed in September may have intersected the southern expression of this stock. Leucocratic fine to medium grained intrusive was located about 60m higher than projected from data located only



SULTAN MINERALS INC.

JERSEY PROPERTY  
NELSON MINING DIVISION, SALMO, B.C.

IDEALIZED SECTION  
NTS

BY : E.L.  
DATE : MAY 20, 1997

FIGURE : 5

55m away. Where previous data indicated an easterly dip, the current hole shows a steep westerly dip, suggesting that a 'ridge' or stock-like structure exists here. This high intersection could be due to a cross-dyke, or it could be a northerly trending stock. If it is the latter, it has implications for potential tungsten mineralization, where limestone beds contact the intrusive. It appears to be a parallel body, possibly of smaller dimension than the Dodger stock, and located about 330m west of the Dodger stock. These three stocks are basically later, smaller, protrusions off the larger, older, and deeper main mass of the Nelson batholith.

Cross-dykes of granitic composition are another intrusive feature. These are usually composed of aplite or aplite-porphphyry, and occasionally are very siliceous, with masses of white quartz scattered throughout. They tend to be erratic with respect to orientation, and range in thickness from 1m to 8m. The cross-dykes are believed to be the youngest of the granitic intrusives.

The Emerald and Dodger stocks are known to be related to the tungsten mineralization as shown by past production experience. In addition to tungsten, intrusives are confirmed to be directly associated with known molybdenum mineralization (as disseminations in some intrusives and in others with quartz veins in a stockwork environment). Also, work since 1993 has indicated that gold is probably intrusive-related. The connection between gold and intrusives has not been definitely established yet, but the gold associations with quartz, bismuthinite, arsenopyrite and pyrrhotite suggest an intrusive relationship.

The third stock -- Jersey stock -- could have similar significance with respect to potential intrusive related mineralization. For tungsten, the projected zone of contact of limestone with the west side of the stock should be investigated. For molybdenum, the projection of known quartz-vein stockworks, and molybdenum bearing dykes are potential areas of interest. For gold, spatial relationships that are similar to the quartz-bismuth, arsenopyrite, and pyrrhotite association on the east and west flanks of the Dodger stock are of interest.

## **2.1 ECONOMIC GEOLOGY:**

Past production was from both lead-zinc, and tungsten deposits. These deposits are separate and distinct from one another. They have totally different associations and environment. Lead-zinc mineralization on the Jersey property is located mostly within the Reeves dolomite member. The HB Mine, 4 km to the north and the Remac mine located 10km to the south are also within the Reeves dolomite member. Tungsten mineralization is found mainly in two distinct environments. One is where favourable limestones contact the late granitic stocks. The other is in favourable zones within the Truman member, not in direct contact with granitics.

### 2.1.1 JERSEY LEAD-ZINC DEPOSIT:

The Jersey Lead-Zinc deposit occurs in dolomite near the base of the Reeves limestone member. Five ore bands, ranging in thickness from 0.3 to 9.0 metres were mined. These bands in order of stratigraphic sequence were:

- 1) Upper Lead Band
- 2) Upper Zinc Band
- 3) Middle Zinc Band
- 4) Lower Zinc Band
- 5) Lower Lead Band.

The five ore bands are locally very close together and in the "A" Zone have frequently been mined as a unit up to 24 metres thick in some areas. Ore mineralization consists of fine-grained sphalerite and galena with pyrite and pyrrhotite. Cadmium is associated with sphalerite and silver with galena. Iron content of the sphalerite is low, about 6%.

The overall grade for the 7,968,080 tons milled averaged 1.95% lead and 3.83% zinc. Mining ceased in 1970 with unmined reserves of 106,000 tons grading 0.80% lead and 3.1% zinc.

### 2.1.2 TUNGSTEN DEPOSITS:

Tungsten occurs in two distinct settings on this property. These are referred to as the Emerald and Dodger types. The Emerald-type occurs where limestone comes into direct contact with the granitic intrusive. The Emerald, Feeney, Invincible and Dodger 4400 are all of this type only. The Dodger-type occurs within a band or series of bands parallel to bedding in the Truman member. These are typically 'skarn' (diopside, vesuvianite, garnet, actinolite), probably the result of metamorphism of a limey argillite. This is not a direct intrusive contact type, but intrusives are usually found within 100 metres. The East Dodger was entirely this type and the Dodger 4200 was mostly this type. Extensive areas of this type are found near the west side of the property near the Emerald, Feeney and Invincible deposits and are referred to as the Lower Skarn Band. Grade is low in the Lower Skarn Band, in the order of 0.2%  $WO_3$ .

Scheelite is the source of tungsten in both types. The Emerald-type is metallurgically superior to the Dodger-type in that its concentrate is cleaner. Molybdenum content is higher in the Dodger-type, occasionally high enough to result in a marketing problem. Total production of both types amounted to 1,597,802 tons of 0.76%  $WO_3$ .

### 2.1.3 GOLD OCCURRENCES

Since 1993, considerable sampling has been carried out in old stopes and of old core, that carried high arsenopyrite and/or pyrrhotite, and of quartz occurrences near these sulfides. From this work and subsequent diamond drilling, three types of gold

occurrence had been recognized. These are: i) quartz-bismuthinite  
 ii) arsenopyrite  
 iii) massive pyrrhotite with or without arsenopyrite.

The work carried out in 1997 revealed a fourth association:

iv) siliceous granitic cross-dykes.

The fourth type, the siliceous cross-dyke association is known to occur in proximity to two narrow (<6m) cross-dykes. One exposure is located in the north end of the mine, in the vicinity of 8400N, 9000E. The other is in the central area, (5300N, 8100E), intersected by drill holes. Relatively little information is available for this fourth type, since it has only recently been recognized. Further study is warranted to see if additional similar dykes exist and to develop a rationale for future exploration.

### 3.0 DIAMOND DRILL PROGRAM

From 3 February 1997 to 8 April 1997, sixteen BQ holes totaling 1215 metres, were drilled from stopes or headings which were driven during the pre-1970 mining operations. Because of the relatively large dimensions of the Longyear 38 drill, drill sites were limited to areas where at least 14' 6" (4.42m) headroom was available. It was not possible to adequately check and scale the back (roof) with the equipment available, where heights exceeded 18' (5.49m). Therefore, to ensure safe working conditions, drill sites were limited to openings with a maximum height of about 18 feet. The drilling was carried out by Westgate Drilling of Salmo, B.C., with a Longyear 38 drill modified to meet the underground operating conditions. The flattest hole drilled was at -10°, but -25° is the lowest practical angle that can be drilled with this machine in most cases.

All core from this phase of the program is stored underground at the old Jersey Mine mechanical shop (See Figure 12). Core racks and boxes are fabricated from wood that has been treated to prevent mold formation and premature rotting.

In September, one surface hole (LJ97-09), was drilled near the 4000 track level portal. (Mine coords in feet: 3190N 7330E 4008 Elevation). This is a vertical hole, drilled to a depth of 77.7m (255ft). Core from this hole is stored in Sultan's Salmo office. A summary of drill hole data is shown in the following table:



**TABLE II**  
**DIAMOND DRILL HOLE INFORMATION**

Pb-Zn; WO<sub>3</sub>; MoS<sub>2</sub>; and Au Testing:

HOLE#	LOCATION		DIP	AZIMUTH		LENGTH	
	(mine grid)	(Elev.)				m	feet
LJu97-1	6112N 7429E	4145	-90	-----		85.95	282
LJu97-2	6110N 7938E	4157	-90	-----		133.80	439
LJu97-3	4957N 7532E	4240	-90	-----		169.46	556
LJu97-4	4877N 7808E	4267	-90	-----		174.64	573
LJu97-5	4880N 8135E	4283	-90	-----		114.00	374
LJu97-6	4431N 7775E	4086	-90	-----		113.68	373
LJu97-7	5425N 8356E	4321	-44	239		69.19	227
LJu97-8	5425N 8354E	4321	-24	239		126.79	416
LJ 97-9	3190N 7730E	4008	-90	-----		77.7	255
Total LJu						1065.2	3495
Au97-1	8157N 9015E	4550	-30	090		35.05	115
Au97--2	8157	9015	4550	-45	090	13.71	45
Au97--3	8320	9080	4553	-58	085	18.29	60
Au97--4	8320	9080	4553	-10	085	8.23	27
Au97--5	8700	9210	4554	-65	092	31.09	102
Au97--6	8700	9190	4554	-65	270	30.48	100
Au97--7	8960	9295	4580	-58	315	51.81	170
Au97--8	8395	9095	4553	-45	150	39.32	129
Total Au						227.98	748
<b>TOTAL PROGRAM</b>						<b>1293.18</b>	<b>4243</b>

All co-ordinates are based on the existing mine grid system which is entirely in 'foot' units. All core was logged at the minesite. Copies of the logs are in Appendix A. The core was usually sampled on the basis of visual evaluation of sulfides for lead-zinc; gold; WO<sub>3</sub> or molybdenum. In the case of gold, it could be any of the four associations noted on page 15. All core was checked with an ultraviolet lamp, and any significant sections that fluoresced were assayed for tungsten. Samples were split with a core splitter at the core logging site, then shipped to Acme Analytical Laboratories Ltd., in Vancouver, B.C. All samples were analyzed for thirty-two elements by ICP Method and fire assayed for gold. Anomalous values for lead, zinc, cadmium, gold, molybdenum, and tungsten were assayed to ensure more precise results. Copies of the assay and/or analysis certificates are in Appendix B.

## 4.0 DISCUSSION OF DRILLING RESULTS

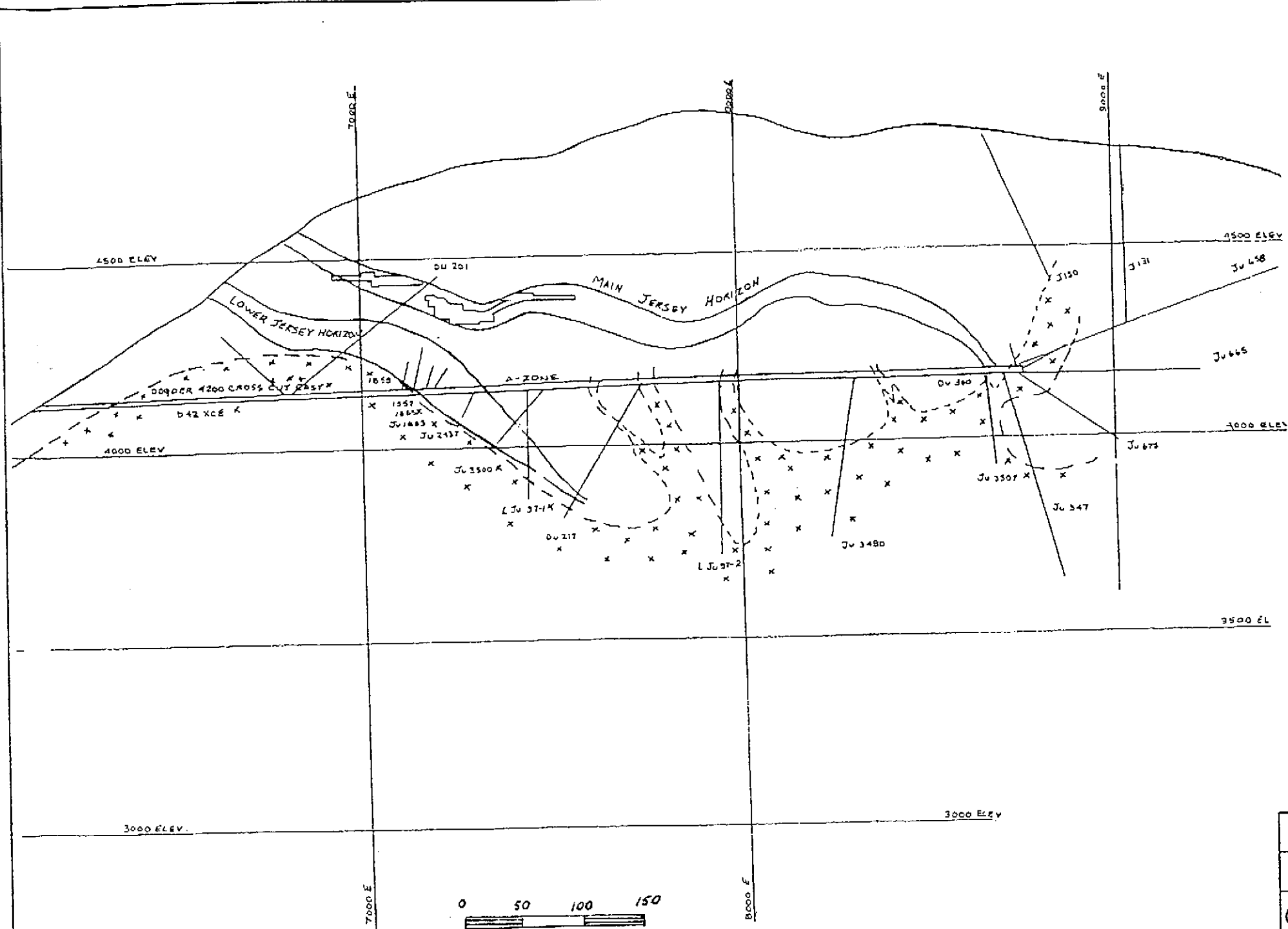
### 4.1 Lower Jersey Horizon:

Holes LJu97-1 and LJu97-2 were drilled vertically into the footwall of the Dodger 4200 cross-cut east to fill in information gaps in drilling completed in the 1950's, '60's and '70's. (See Figure 7) This section (6100N) also includes the only stope from the *previous operation that was within the Lower Jersey Horizon. It is located on the west side of the mine at about 7200E, and is immediately above the Dodger 4200 cross-cut. LJu97-1 was drilled about 91 metres east of the above stope and was intended to test the downdip extension to the east, adding to the data obtained from earlier nearby holes Ju 2457, Ju 3500 and Du 217. The conclusion to be drawn from LJu97-1 is that the Lower Jersey Horizon in this area thins downdip and to the east. In drill hole Du 217, it is only 1.5 to 2.0 metres thick. LJu97-2 is a vertical hole located approximately 155m east of LJu97-1. It was drilled to determine if the Lower Jersey Horizon would continue beyond Du 217 and possibly increase in thickness to the east, and also to provide more information on the possibility of a third stock, located between and parallel to the Emerald and Dodger stocks.*

*The results from 97-2 indicate that the Lower Jersey Horizon is cut off by the intrusive, somewhere to the west, between Du 217 and 97-2. With respect to the intrusives, it appears that the third stock (referred to as the Jersey stock) is located west of 97-2. Further drilling is needed to confirm this. No significant MoS<sub>2</sub> was found in this hole. Potential for WO<sub>3</sub> exists to the west, where the downdip projection of the Lower Jersey Horizon contacts the Jersey stock. Low gold values, 40ppb, were found in a possible intrusive cross-dyke type association. While the intersection was not in an economic range, it does confirm that gold occurs in this setting in this area also.*

Vertical drill holes LJu-3, -4, and -5 were collared approximately along the 4900N coordinate. The holes are about 90m apart. (See Figure 8). LJu97-3 intersected a 3m width of skarny dolomite at 54.4m to 58.0m which may represent an altered Lower Jersey Horizon bed. Stratigraphically it is at about the right location.

*However, no lead-zinc was seen in this intersection. This hole was unusual also, because of the lack of carbonates, and the abundance of silicified argillites. Except for the intersection noted above, it was almost entirely argillites with varying degrees of silicification from 15m to 168.5m, at the end of the hole. In this respect it is similar to Du 217 on the 6100N section and Ju 1154 on 4100N. LJu97-3 was terminated before the intrusives were reached, but based on 97-4, 91m to the east, intrusives shouldn't be too far below the bottom of the hole.*



LAMPROPHYRE	NELSON BATHOLITE	VARIABLE COMPOSITION AND GRAIN SIZE	1
	GRANITIC INTRUSIVES	GRANITE, GRANITE PORPHYRY	2A
SEDIMENTS	REEVES MEMBER	APLITE, SILICEOUS PORPHYRY	2B
		LIMESTONE	3A
		DOLOMITE	3B
	TRUMAN MEMBER	ARGILLEOUS, LIMESTONE AND OR DOLOMITE	3C
		MICACEOUS ARGILLITE	4A
		SILICEOUS ARGILLITE	4A
		LIMESTONE	4B
		SKARN	4C

SULTAN MINERALS INC.  
 JERSEY PROPERTY  
 NELSON MINING DIVISION, SALMO, B.C.  
 6100 NORTH VERTICAL SECTION  
 LOOKING NORTH

BY : E.L.  
 DATE : MAY 20, 1997  
 FIGURE : 7

SURFACE

4500' asl

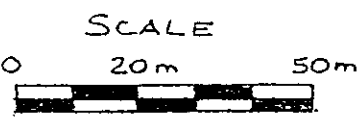
4900 CROSS CUT EAST

4000' as

EMERALD STOCK  
(PROJECTED FROM  
U/G SURFACE AND  
DIAMOND DRILL  
HOLE DATA)

7500 E  
(MINE GRID)

8000 E  
(MINE GRID)



SCALE

0 20m 50m

LJu 97-3

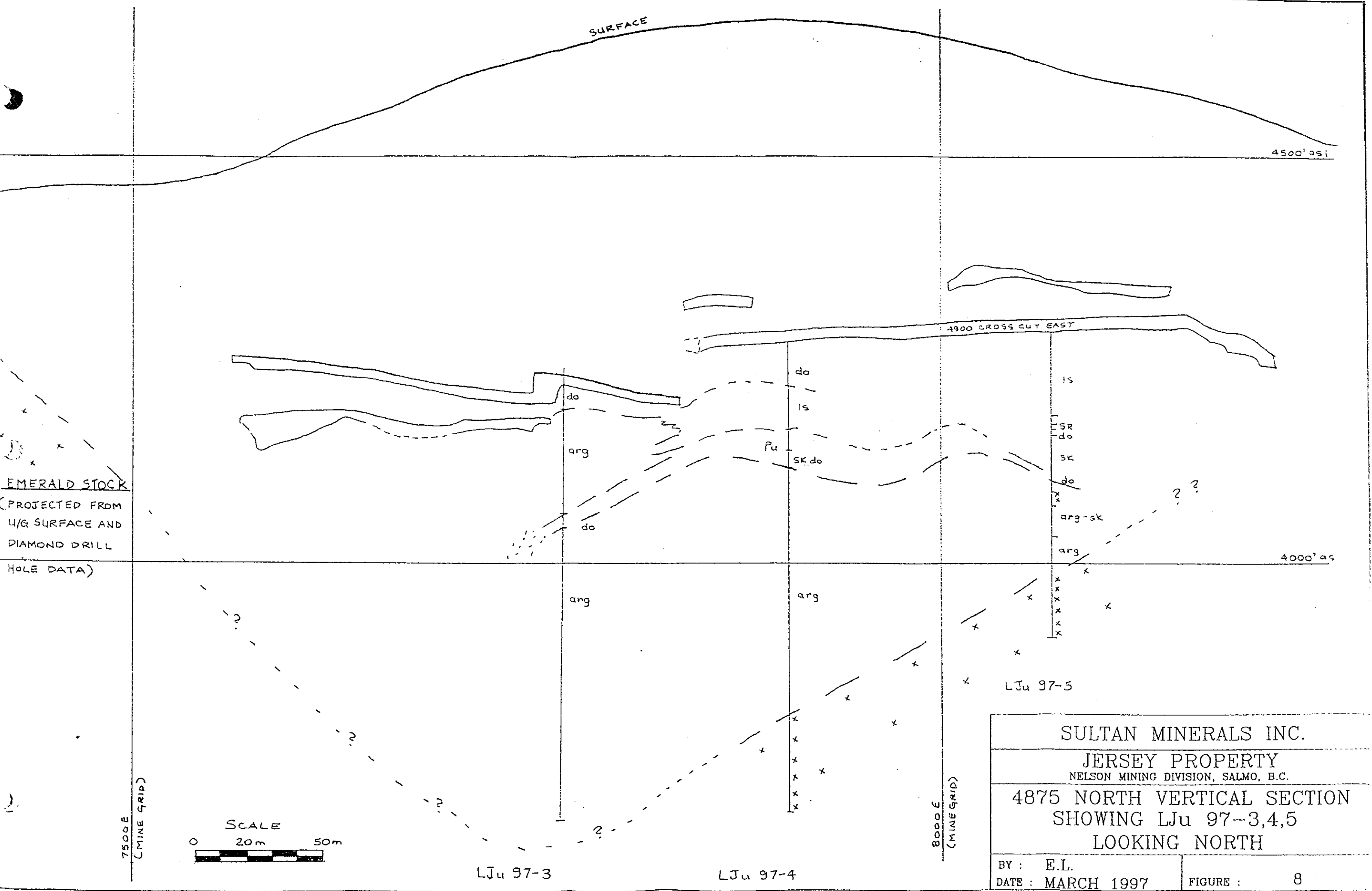
LJu 97-4

LJu 97-5

SULTAN MINERALS INC.  
 JERSEY PROPERTY  
 NELSON MINING DIVISION, SALMO, B.C.  
 4875 NORTH VERTICAL SECTION  
 SHOWING LJu 97-3,4,5  
 LOOKING NORTH

BY : E.L.  
 DATE : MARCH 1997

FIGURE : 8

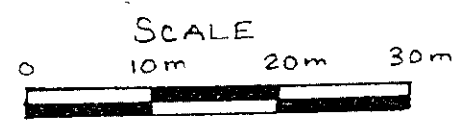
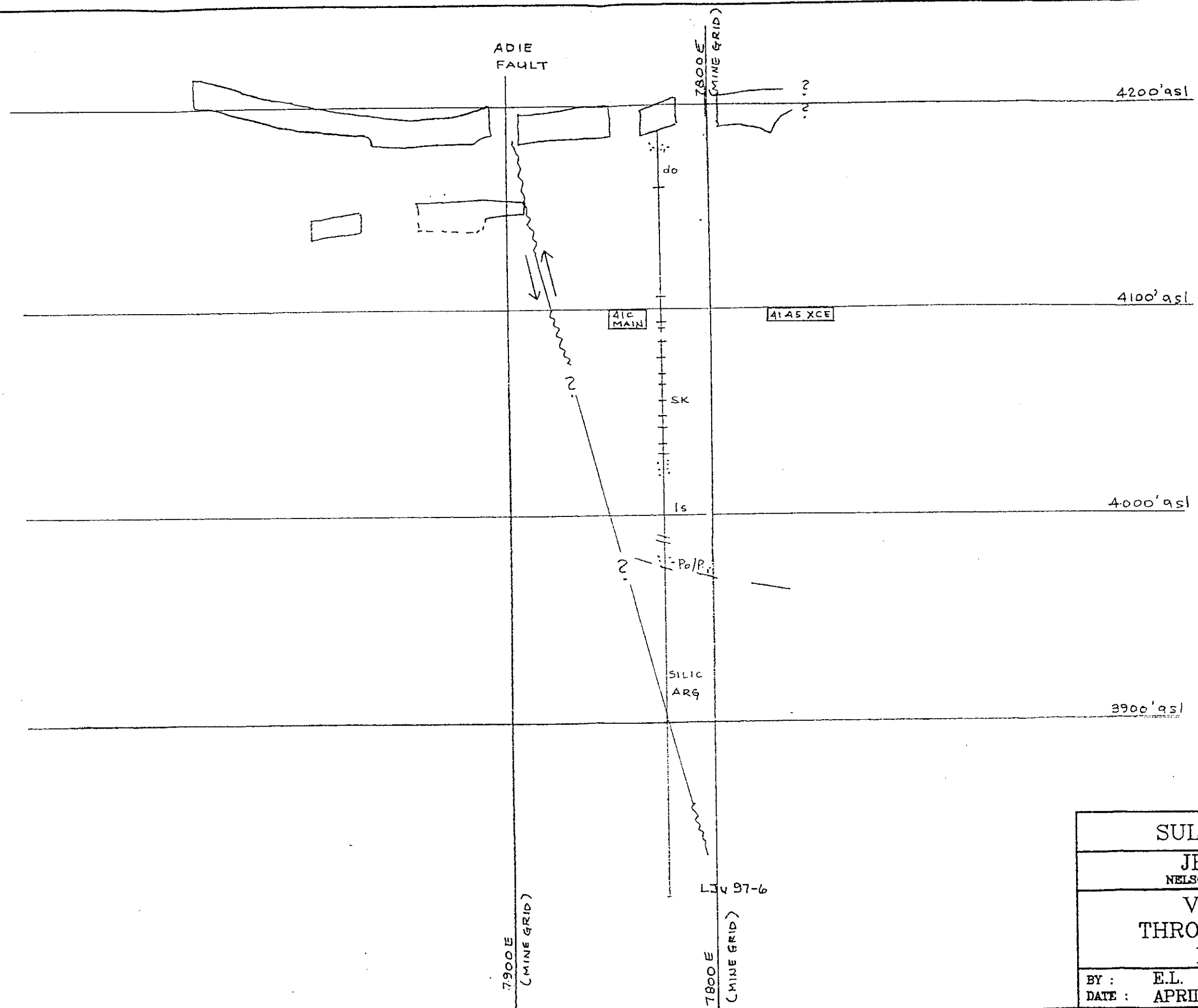


From the collar, 97-4 cut 47m of carbonates. The interval from 24.4m to 47m probably represents the Lower Jersey Horizon. The intersection from 31.82m to 36.70m was about 30% sulfides. Within this section, the average grade was 1.1% Pb and 2.0% Zn. The occurrence of the lead-zinc mineralization within an area of high pyrite and pyrrhotite is consistent with other Lower Jersey Horizon lead-zinc occurrences. Minor fluorescence was noted over 3m from 103.5m to 106.5m. This sample was anomalous for tungsten, but low at 0.025%. Due to the closeness of the intrusive here, there is potential for tungsten where the Lower Jersey Horizon contacts the stock, which would appear to be east of 97-5. Intrusives were intersected at 134.6m and continued to the end of the hole at 176.16m. This material appears similar to that cut by 97-2. The elevation (3826 feet) of the stock shown by this hole indicates a slope to the west. LJu97-5 had a stock intersection point elevation of 3987 feet. This is considerably higher than expected, lending more credence to the third stock hypothesis (the Jersey stock). As with 97-3, hole 97-4 revealed a large thickness of silicified argillite.

LJu97-5 is located 99.0m east of 97-4, in the same drift, the 4900 cross-cut east. The upper portion of the hole, to 32.92m, is mainly a coarse-grained blue-grey banded limestone, with scattered bands of white and grey coarse-grained limestone. Immediately below is a skarny limestone with disseminated and massive pyrite and pyrrhotite. A 0.61m section here runs 0.6% lead 1.5% zinc and 6.8gm/mt Ag. This is probably the Lower Jersey Horizon lead-zinc zone at this point. Underlying the above, is a 2.41m thickness of unmineralized dolomite, which in turn is underlain by a 3.99m layer of mainly white coarse grained limestone. Beneath this is mostly siliceous or skarny argillites to the intrusive contact at 88.36m. A narrow, very fine grained white aplitic dyke, with rare specks of  $\text{MoS}_2$  was intersected at 62.18m. This appears similar to the cross-dyke cut by 97-7 and 97-8. What may be the southern continuation of the postulated Jersey stock was contacted at 88.36m and continued to the end of the hole at 113.99m. This material is primarily a medium grained leucocratic granite with 5-10% mafics.

Hole 97-6 is located 137m south of 97-4. It was collared on the footwall of 45C stope, which is on the eastern side of the Jersey 'track' mine. This was in an area where previous production grades were higher than average. LJu97-6 intersected the Lower Jersey Horizon between 48.8m and 64.2m. Pyrite-pyrrhotite was evident in the interval 48.8m to 51.9m, with minimal zinc; and in the interval 56.11m to 64.19m, again with low grade lead-zinc. The Lower Jersey Horizon here is considerably lower than expected.

This may be due to faulting and/or folding. Altered argillites were intersected from the base of the Lower Jersey Horizon to the end of the hole at 113.7m. The hole was terminated prior to reaching the intrusive. No significant  $\text{WO}_3$ , Au or Mo assays were returned from this hole.



SULTAN MINERALS INC.	
JERSEY PROPERTY NELSON MINING DIVISION, SALMO, B.C.	
VERTICAL SECTION THROUGH HOLE LJu 97-6 LOOKING NORTH	
BY :	E.L.
DATE :	APRIL 1997
FIGURE :	9

Holes LJu97-7 and -8 were drilled to test earlier intersections in drill hole 94-08. 94-08 intersected two separate lead-zinc bands separated by 6m of waste, within what is believed to be the Lower Jersey Horizon. The upper band is 0.8m of 1.7% lead, 3.1% zinc, the lower band is 1.9m of 2.5% lead and 2.3% zinc, 12.1m deeper in the hole, 0.4m of 16.08gm/mt Au was intersected in a siliceous fine-grained aplitic dyke.

Hole 97-7, drilled at -44° and on azimuth of 239°, intersected fine-grained intrusive where the Lower Jersey Horizon was projected to be. Likewise in 97-8, intrusive was intersected where the Lower Jersey Horizon was anticipated. Thus, with respect to the Lower Jersey Horizon, no conclusive results were obtained.

During the drilling of 97-7, a section of very fine grained white aplite was observed between 55.7m and 60.0m. This material has a glassy appearance and at first was thought to be quartz. On closer examination, it was found to be a very fine grained intrusive. Re-examination of 94-08 revealed that the gold intersection occurred within a similar rock. Thus, the gold occurrence here is associated with a siliceous fine-grained aplitic cross-dyke. Molybdenite and bismuthinite also occurred with the 94-08 gold values. 97-8 also intersected similar very fine-grained aplite. However, although MoS<sub>2</sub> was evident in both of the '97 holes, no bismuthinite was seen, and also no significant gold.

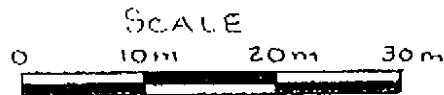
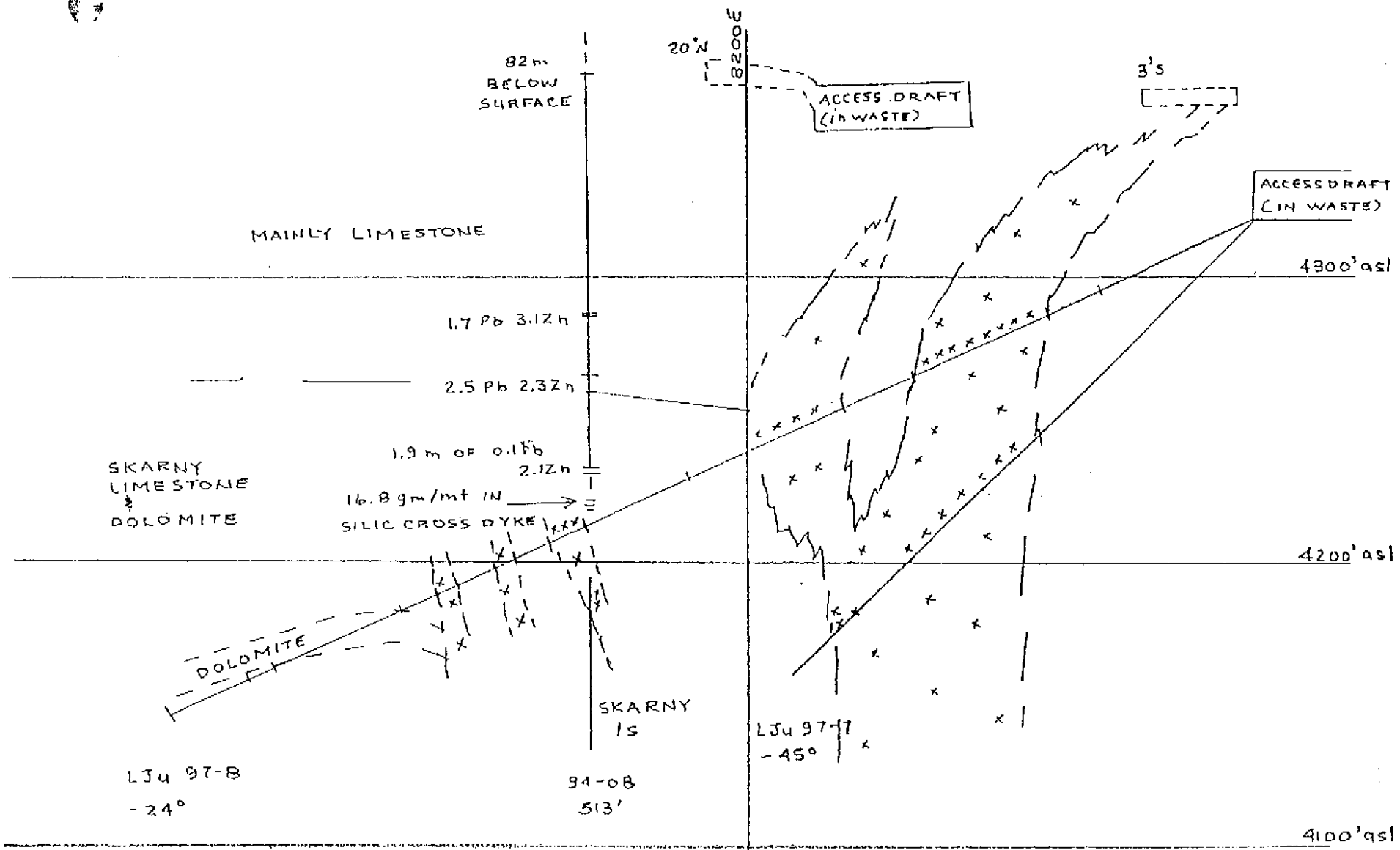
This siliceous cross-dyke occurrence is similar in many respects to the intersections of gold found in drill hole Ju 2788, that assayed 6.86gm/mt, and Au97-8 which assayed up to 4.85gm/mt.

Diamond drill hole LJ97-09 was intended to test the possible eastward extension of the mineralization found by 95J-05, which was drilled in 1995. This hole intersected 2.7m of 3.36% Zn within carbonates that are consistent with the Lower Jersey Horizon stratigraphy. While LJ97-09 did cut the Lower Jersey, and some mineralization was found, it was low grade at 1.5% Zn, with less than 0.1% Pb. Unexpectedly, the zone was found to be about 35m higher than projected, at about 32.3m below the surface. This suggests that we may have a small anticline or 'ridge', similar to those found in the Jersey during previous operations. These ridges did not seem to have any significance with respect to mineralization and therefore this ridge -if that is what exists here- is significant only for the fact that it indicates a flexure in the strata.

Because significant mineralization has been found to the north in holes Ju270 and 96-08 --3.8 Pb, 8.1 Zn over 1.3m and 4.7 Pb, 2.6 Zn over 5m respectively-- further testing of this area is warranted.

#### 4.2 Molybdenum:

As noted above, the very fine-grained siliceous aplitic dyke intersected by 97-8 carried MoS<sub>2</sub>. The assay across the full 1.68m of the dyke width was 0.43% Mo (0.72% MoS<sub>2</sub>)



SULTAN MINERALS INC.	
JERSEY PROPERTY NELSON MINING DIVISION, SALMO, B.C.	
VERTICAL SECTION THROUGH DRILL HOLES LJu 97-7 & 8 LOOKING 329 Az	
BY : E.L.	FIGURE : 10
DATE : MAY 1997	



equivalent). This is a significant, though relatively narrow, intersection. However, the dyke intersected further up the hole, had thickened from 1.5m in 52E stope to 13.7m in a downdip distance of 35m. It is possible that the dyke in 97-8 could also thicken with depth.

### 4.3 Tungsten:

Exploration for tungsten involves selecting targets by using a model for mineralization based mainly on the Emerald-type occurrence. This requires careful study of the geology in order to project where limestone would contact a granitic intrusive.

The drilling program carried out this year was not intended to test WO<sub>3</sub> "targets". Though not specifically planned to gather WO<sub>3</sub> data, it did provide some new information useful for future exploration.

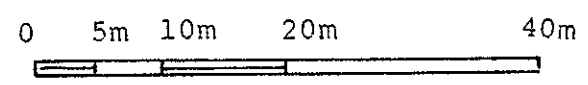
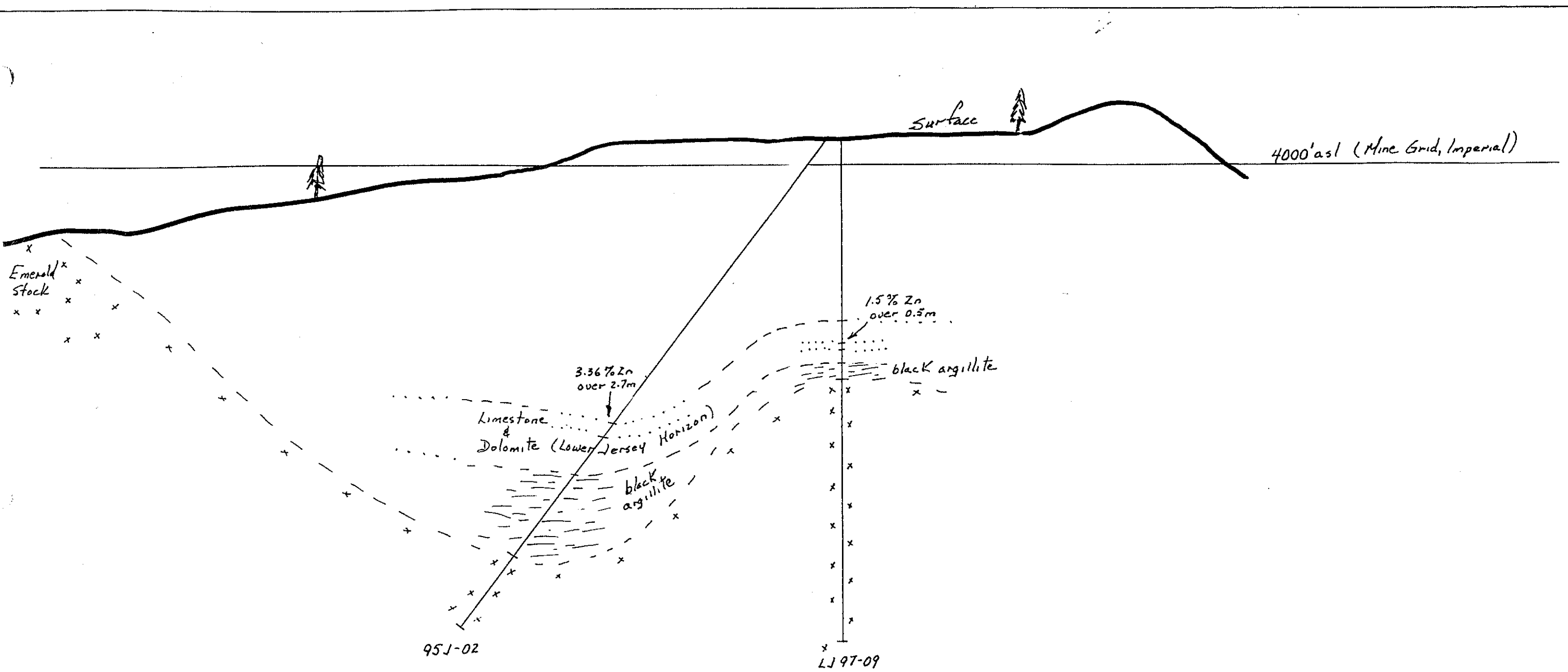
As noted under the discussion of LJu97-4 and -5, conditions east of 97-05 are favourable for tungsten mineralization. Likewise, on 6100N (Figure 7), conditions exist between drill holes Du 217 and LJu 97-2 for potential tungsten mineralization. If the Jersey stock proves to be as continuous as the Emerald or Dodger stocks, then tungsten could occur in a N-S trending zone where the limestone contacts the stock. The west side of the Jersey stock would be the most favourable side, although tungsten was also found on the east side of the Dodger stock. As noted earlier, southerly continuation of the Jersey stock may have been located by surface ddh LJ97-09. If this is the case, there is good potential for tungsten where the carbonates come into contact with the stock. If the proposed interpretation is correct, there should be a northerly trending contact area to the west of LJ97-09. Of significance, there is a good intersection of tungsten in ddh J14, drilled in 1948, --0.87% WO<sub>3</sub> over 1.5m. This hole is located about 120m north of LJ97-09. This would represent a previously unknown area of potential tungsten.

### 4.4 Gold Occurrences:

A total of 228.00 meters of BQ hole was drilled for this aspect of the program. The purpose for all the holes drilled during this program was to test favourable targets identified by examining the logs of holes drilled during the previous mining operation. The logs of all holes north of 5000N and along the eastern side of the mine, were examined to identify holes where any of the following associations were present:

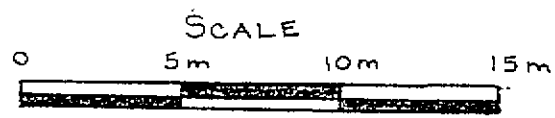
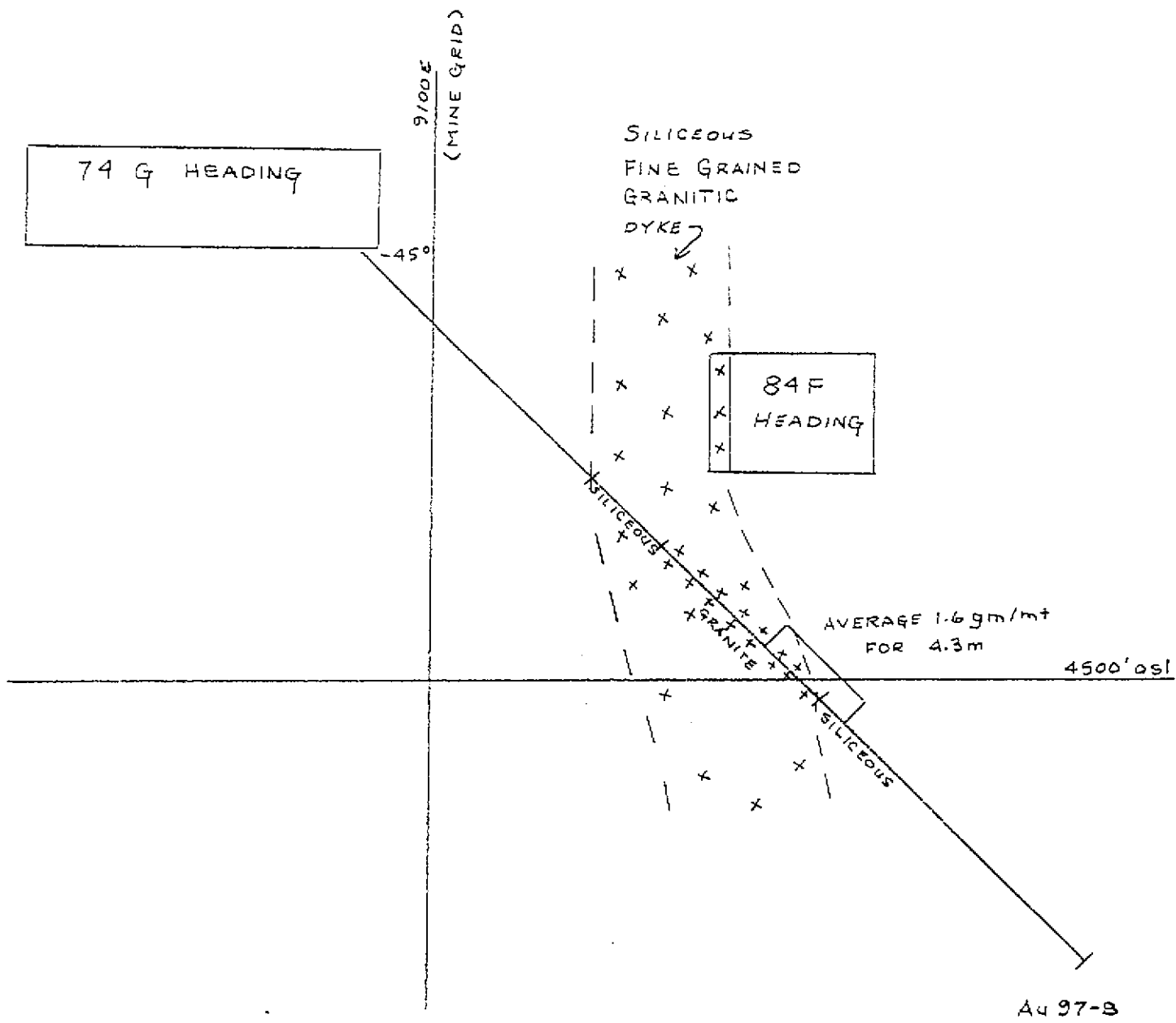
- 1) quartz-bismuth
- 2) arsenopyrite
- 3) pyrrhotite-pyrite.

From the list of holes this procedure produced, targets were developed, and if there was accessibility for the drill, drill sites were planned. As noted earlier under the Lower Jersey Horizon discussion, some of the LJu97 holes intersected anomalous gold values.



SULTAN MINERALS INC.  
 JERSEY PROPERTY  
 Vertical Section 3100N  
 Looking North  
 By: E.A.L.  
 Date: 5 Nov 97





SULTAN MINERALS INC.		
JERSEY PROPERTY NELSON MINING DIVISION, SALMO, B.C.		
VERTICAL SECTION THROUGH Au 97-8 LOOKING 060°		
BY :	E.L.	FIGURE : 13
DATE :	MARCH 27, 1997	

Holes Au 97-1 and -2 were drilled to test the area adjacent to Ju 3265, where a 1.37m section assayed 2.74gm/mt Au and 3.40gm/mt Ag. Gold values were low in both holes. Holes Au 97-3 and -4 were intended to test the values found in old hole Ju 2788. Unfortunately both holes broke into old stopes prior to reaching the target area. Holes Au 97-5 and -6 were planned to check a high pyrrhotite-pyrite section of Ju 2813. The best result was from 10.8m to 11.4m in Au 97-5 which ran 0.28gm/mt Au and 4.2gm/mt Ag.

Hole Au 97-7 is the most northerly of the 1997 series of holes testing the gold potential on the east area of the mine. The best gold intersection in this hole was between 44.29m and 45.48m, where a value of 5.03gm/mt was returned. This was a section of massive pyrrhotite with minor pyrite and a trace of chalcopyrite, within a siliceous limestone gangue. Anomalous Bi, at 933ppm, was also found here. The section from 41.00m to 42.67m contained significant sulfides --pyrrhotite, pyrite-- and anomalous, but low values of gold, (0.24gm/mt).

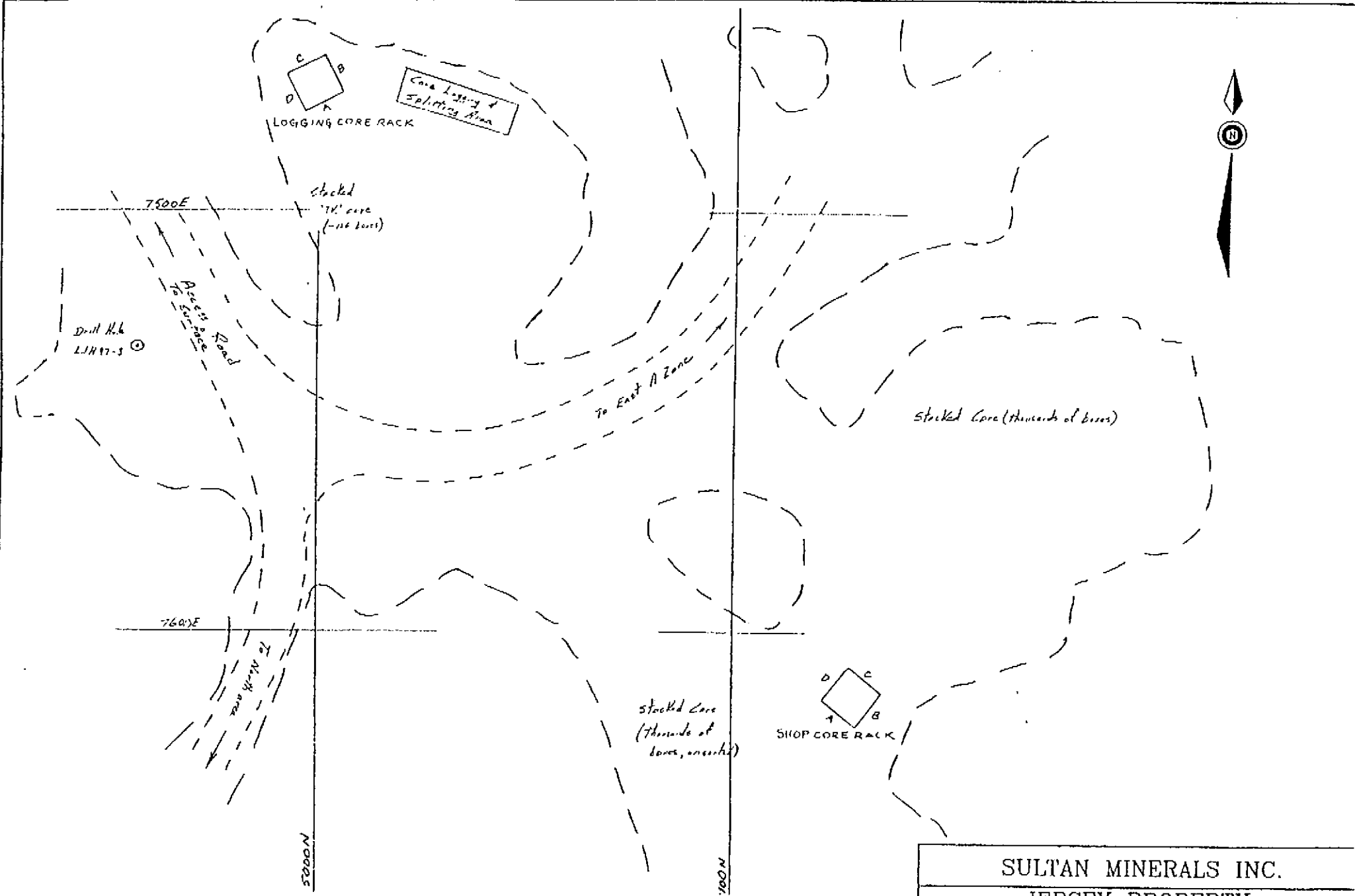
The purpose of Au 97-8 was to test the siliceous cross-dyke association which was indicated by Ju 2788 where assays of 6.85 and 7.85gm/mt were found. Results from Au 97-8 were 2.76gm/mt Au in the 16.6m to 18.9m interval (near the north contact of the cross-dyke), 2.53gm/mt Au in the 22.1m to 23.1m interval (near the central area of the dyke), and 4.85gm/mt Au near the south contact.

#### **5.0 Rehabilitation and Sampling of Core from Pre-'90's Programs:**

A large amount of core from Canex's previous operation is stored underground at the equipment repair shop area (5100N, 7600E). This core was moved underground in the fall of 1973. Due to the high humidity, considerable deterioration of the core boxes occurred. Some stacks have collapsed and tipped over, resulting in total loss of that core. Other boxes are so stained or rotted that identification of the core is impossible. Part of this program's purpose was to rehabilitate and sample, if warranted, some of the core for certain crucial areas. Crucial holes were first identified by examining previous logs, searching for associations that have been identified as favourable to gold mineralization. Then an attempt was made to locate the core so it could be examined and sampled. After sampling, the core was reboxed in new boxes constructed of preserved wood, and then stored in core racks constructed of preserved 4x4 lumber.

Table III shows the location and identification of core in the racks.

In order to preserve the enormous amount of data available in the core currently stored underground, further core rehabilitation will be needed to ensure that this resource is not permanently lost. (See Fig. 14)



SULTAN MINERALS INC.	
JERSEY PROPERTY NELSON MINING DIVISION, SALMO, B.C.	
CORE STORAGE AREAS	
BY : E.L.	FIGURE : 14
DATE : MAY 20, 1997	

## 5.1 RESULTS FROM PREVIOUS CORE SAMPLING:

The goal of sampling the previous operation's core was to obtain more information on the distribution of gold within the area of interest. This additional data will help to improve our understanding of the various gold associations already identified. Prioritizing targets will result in more effective evaluation of the gold potential on this property.

The three previously identified gold associations (quartz-bismuth veins; arsenopyrite; and massive pyrrhotite-pyrite) were the key means to locate areas within the previous core for sampling. However, one hole, Ju 2788, returned several assays in the 5gm/t - 8gm/t range, that led to further investigation. It was determined from existing geological mapping of the previous operation, that this hole was adjacent to a siliceous granitic cross-dyke. In this area, the cross-dyke is characterized by areas of quartz scattered throughout the dyke, comprising about 10% of the total dyke. A similar gold association was noted in hole 94-08. With this additional 'association-type', it will now be possible to identify further areas of potential by reviewing the existing underground geological mapping, and to then examine and sample the cross-dykes where feasible.

## 6.0 TRENCHING PROGRAM

Trenching in the southwest corner of the Jersey #1 four-post mineral claim was done as part of an ongoing review of the geology of the area south of the Jersey mine to Lost Creek. This includes claims at the south end of the Emerald-Jersey property, as well as the TK Group.

One of the key factors needed to develop an interpretation of this region, is an understanding of the attitude and position of the black argillite contact with the overlying favourable sediments. The black argillite is important for two reasons:

1. it is an easily recognized marker, very distinct from the overlying carbonates and shales.
2. it marks the lower limit of potential for the types of mineralization mined from the 'Iron Mountain' deposits, i.e., zinc, lead, tungsten, silver and cadmium. There are no known deposits of economic importance in the black argillite in this region.

Therefore, if the structure of the black argillite upper contact can be established in an area where exploration is being carried out, it will be a great help in planning a sound program.

With this concept in mind, a review of the existing geological data was initiated in August 1996. It has been worked on intermittently since that time, with heavier emphasis on the TK group area since July 1997.

The target area can be divided into two sections, with the northerly trending Emerald stock as the dividing line. The reason for this division is both geological and economic. The past producers of zinc, lead, silver, and cadmium on Iron Mountain are only east of the Emerald stock. Whereas in the area west of the Emerald stock, only tungsten has been produced to date.

## **6.1 DISCUSSION OF TRENCHING RESULTS**

The work carried out this year was in the 'east' section. Initially the area on the east side of the Big Dick MC was traversed to confirm the old data which showed the unusual attitude of the black argillite here. Following that, a series of five trenches, totaling 32 meters, were dug to define the argillite contact, and the attitude of the strata. See Figure 15. This work showed the strata to be dipping southwesterly, with the black argillite overlain by altered limey sediments (some skarn has developed). There is a steep -- 40° to 45° -- southerly component to the dip here. It is this steep dip that opens up the potential for additional mineralization. If the strata continued to dip at the same degree as the Jersey deposit, the ore-bearing horizons would have been eroded by the Lost Creek drainage system. Therefore, based on the data available to date, there is still potential in this area, on the east side of the Emerald stock, for lead-zinc and tungsten mineralization. Further work, initially trenching along existing roads, followed by diamond drilling, is needed to adequately evaluate this ground.

## **7.0 GEOCHEMICAL SURVEY (Posie Group)**

Five samples were collected along line 51+50N from 33+00E to 34+00E, and five samples on line 50+50N from 33+00E to 34+00E. The results of this work confirmed earlier anomalies for zinc and silver in this area. (See Figures 16; 17, and 18 for results)





Line 52160	51N	56	55	54	53	52	51N
1434	1595	1273	3858	1339	1226	841	1431394005
1172	1710	1886	5857	986	926	1806	781
1573	2998	1349	1150	560	926	1805	781
1807	2223	1416	1131	912	990	1314	559
2802	2825	1625	1200	1379	990	1315	559
1192	1563	4341	1019	1136	1171	1334	1110
1464	886	1674	1650	1099	1171	1263	1110
1437	1319	1687	1777	1388	477	1256	1304
1765	2018	1850	1462	1528	1005	1911	1749
4149	1630	1857	2212	1909	1350	2048	1850
	1368	2015	4609	1531	1047	1378	2011
	1219	1661	4633	1542	1126	1782	1980
	2983	2034	1220	1558	3273	1911	1749
	2209	1349	414	2117	1747	2251	1557
	3034	1092	1789	1733	1870	2251	1550
	1743	1272	1310	1642	2179	1911	1980
	1168	1151	1141	1500	5482	1911	1749
	1068	2381	1789	1391	1082	2048	1850
	574	1431	1053	1327	1000	1378	2011
	337	2109	714	2114	1215	1911	1749
	797	1343	603	2166	1208	2864	1980
	304	2450	111	1252	1161	1833	1550
	409	1314	246	1767	1089	1471	1505
			188	2048	1395	1138	2318
			190	1386	2433	1702	2823
			679	658	702	2366	1409
			679		806	1135	2889
			679		848	3414	4535
			679		1451	2212	559
			679		2092	602	1706
			679		1376	1015	1490
			679		3300E	1433	2039
			679		1186	1075	1168
			679		4324		1303
			679		2362		2337
			679		318		2298
			679				307

37000E



<b>SULTAN MINERALS INC.</b>	
JERSEY EMERALD PROPERTY NELSON MINING DIVISION, SALMO, B.C.	
POSIE GRID ZN GEOCHEM VALUES in PPM	
By: E. A. L. Date: Dec 31/97	FIGURE 16

Line 52140

51N	56	55	54	53	52	51N
9	3	1.7	4	3	0	3
4	0	1.7	0	4	4	0
7	3	1.7	0	7	5	0
4	1.1	0.6	0	6	0	0
8	3	0.8	0	6	0	0
5	1.1	0.5	5	1.2	0	5
4	0	0.5	5	0	0	394005
6	3	0.9	5	4	4	5
8	8	0.7	0	4	5	4
1.2	7	0.3	0	3	6	4
1.9	3	1.8	6	8	7	0
2.6	0	1.5	4	3	0	4
1.0	9	4.2	4	9	0	8
2.0	3	1.9	3	4	4	0
4.6	8	1.1	4	8	6	0
6	4	1.1	1.0	3	8	0
1.8	8	1.7	1.0	1.6	4	0
9	1.2	1.7	1.0	1.2	9	0.8
9	1.4	1.7	3	7	5	6
3.0	1.0	0.7	1.1	7	3	0
6	7	1.7	1.9	2.8	4	3
3	3	1.6	5.2	1.3	3	4
6	7	1.7	1.4	3.2	6	0
3	1.3	1.6	1.6	7	1.1	8
6	1.0	1.7	0.9	2.2	1.5	1.9
8	9	0.4	1.0	0.9	1.3	1.0
3	4	0.4	0.8	0.6	1.4	0.9
4	5	0.5	0.6	0.3	1.4	2.0
8	4	1.7	1.7	1.6	11.0	4.6
3	4	0.4	1.7	1.7	5.2	1.5
7	5	0.5	0.9	1.7	5.0	0.4
6	1.0	1.0	0.8	1.7	1.2	2.1
				1.6	2.4	0.6
				1.1	2.4	2.9

SULTAN MINERALS INC.

JERSEY EMERALD PROPERTY  
NELSON MINING DIVISION, SALMO, B.C.

POSIE GRID  
AG GEOCHEM VALUES in PPM

By: E.A.L.  
Date: Dec 31/97

FIGURE 17





## **CONCLUSIONS:**

### **Lower Jersey Horizon -- Lead-Zinc exploration:**

- 1) The Lower Jersey horizon has been shown to be a reality. It is not a simple continuous carbonate horizon, but tends to tail out, or have a facies change from west to east, resulting in a carbonate-poor area which is shown by the results of LJu 97-1, -2, and -3. However, the horizon is identifiable again to the east of LJu 97-3, in LJu 97-4, -5, -6, -7, -8, and 94J-08.
- 2) Lead-Zinc mineralization in LJu 97-4 and 94J-08, ranged from 1.1%Pb, 2.0%Zn, to 1.7% Pb, 3.1%Zn, over thickness' ranging from 1.9m to 4.9m.
- 3) A reasonable degree of continuity exists for the sulfide-rich band that hosts the Lead-Zinc, as shown in Figure 8.
- 4) Potential to the south of the existing mine, in an area bounded on the west by the Emerald stock, and on the east by the black argillite, remains encouraging. further work is needed to test the area north of ddh LJ97-09 up to the south end of the 3941A stope located on the west side of the Jersey track mine. Likewise additional work is warranted to gather more data on the area south to Lost Creek.

### **Gold Exploration:**

- 1) Four distinct associations have been identified for gold at this time:
  - i) quartz-bismuthinite
  - ii) arsenopyrite
  - iii) massive pyrrhotite-pyrite
  - iv) siliceous granitic cross-dykes.
- 2) Continuity of each of these types is limited. Type (iv) seems to have the best possibility of having sufficient continuity to be mineable.
- 3) Grade of mineralization is up to 6.86 gm/mt range, considering results from all four types.

Further work on existing core, underground openings, and existing underground mapping, is warranted, to obtain more data on all four associations, with the goal of narrowing the field to more specific targets. Further evaluation of the cross-dyke association is particularly important, in view of the MoS<sub>2</sub> found in LJu 97-8 noted below.

### **MoS<sub>2</sub> Exploration:**

- 1) Significant MoS<sub>2</sub> was found in LJu 97-8 and 94J-08 in a very fine grained siliceous granitic cross-dyke. Notable gold was associated with this dyke in 94J-08. More research of existing data, remapping and sampling of present underground exposures would be very useful in evaluating potential and developing future exploration targets.

### **Tungsten Exploration:**

- 1) The likely contact between carbonates of the Lower Jersey Horizon and the postulated Jersey stock is a target with good possibility of success as more geologic data is obtained on the location and orientation of the Jersey stock. The possible southern continuation of the Jersey stock, as shown by ddh LJ97-09, opens up the possibility of a new zone of potential along the west side of this stock. The unusually located and unexplained high tungsten value found in J14, drilled in 1948, could be due to this stock.
- 2) Potential on the east side of the Emerald stock, bounded on the east by the black argillite, south onto the TK group, is interesting. The work done by Canex in 1952 on the Alfie MC, (Mine coords --0250S, 6600E)-- confirmed the existence of Dodger-type tungsten mineralization in that area. In view of the new concept of the favorable beds not being eroded here, there is a possibility that to the east, these beds are in the proximity of, or are in contact with the Emerald or the Jersey stocks, indicating that further tungsten deposits may exist here.

Further work in the form of geologic research, compilation of available data and the preparation of sections and plans is warranted so that continued exploration for the Au-Ag; Pb-Zn; MoS<sub>2</sub>; WO<sub>3</sub> potential of this unique property can efficiently proceed.

### **Geochem Posie:**

The results obtained from the follow-up geochem sampling done this fall indicate that further sampling in this area is needed. This work would check for the southern continuation of the anomaly discussed earlier in this report. Geologist Linda Dandy, under whose supervision this work was carried out, suggests excavator trenching of areas where zinc values exceed 5000ppm and where silver values exceed 5ppm. If rock sampling results warrant, drilling of targets developed could be carried out.

**REFERENCES:**

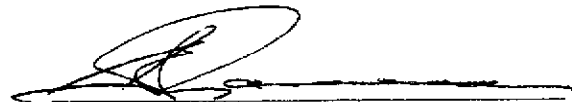
- Dandy, L., 1996; Geological, Geochemical and Diamond Drill Report on the Jersey-Emerald Property.
- Fyles, J.T. and Hewlett, C.G., 1959; Stratigraphy and Structure of The Salmo Lead-Zinc Area: B.C.D.M., Bulletin No. 41.
- Grunenberg, P., 1994; Summary of Research on the Jersey Property, Nelson M.D.: Unpublished Report for Sultan Minerals Inc., 5pp.
- Lawrence, E.A., 1974; A Summary Report of the Production History and Geology of the Salmo Division, Canex Placer Limited: Unpublished Internal Report for Canex Placer Limited.
- Lawrence, E.A., 1982; Summary Report on 1981 MoS<sub>2</sub> Program on Emerald Property. Unpublished Report. 13pp.
- Little, J.D., 1952; *The Lead-Zinc and Tungsten Properties of Canadian Exploration*, Ltd., Salmo, B.C.
- Mathews, W.H.; Geology of the Sheep Creek Camp, BCDM Bulletin No. 31.
- Troup, A.G., 1995; Diamond Drilling Report on the Jersey Property, Nelson Mining Division, B.C.; Sultan Minerals Incorporated.

### Statement of Qualifications

I, Edward A. Lawrence, P.Eng, of 3590 Wiig Road, Westbank, in the Province of British Columbia,

DO HEREBY CERTIFY THAT:

1. I am a self-employed, consulting engineer,
2. I am a graduate of the University of British Columbia, with a degree of B.A.Sc in Geological Engineering,
3. I have practiced my profession since graduation in 1959,
4. I am a *Registered Professional Engineer in the Province of British Columbia*,
5. I hold no interest, directly or indirectly in Sultan Minerals Inc.



E. A. Lawrence, B.A.Sc., P.Eng

Dated at Westbank, B.C.  
this 15th day of December, 1997.



COST STATEMENT  
 JERSEY MINE PROPERTY  
 1 February - 30 October 1997

DIAMOND DRILLING

Salaries & Wages: 7Pers, 244days @ \$285.48		\$ 69,657.98
Benefits: @ 20%		13,931.60
Food & Accomodation: 244 ndays @ \$28.75		7,013.78
Supplies & Sundry:		4,748.76
Fuel:		817.64
Field Office Expenses:		1,507.54
Fixed Wing: (CAI) 3 Smithers-Castlegar		997.02
Snow Removal: Fred Critchlow Bulldozing		21,341.15
Shipments:		3,825.00
Core Boxes:		2,081.30
Rental Equipment:		
4wd pickups, 155days @ \$33.62	\$ 5,210.35	
Trailer, 4hrs @ \$25	100.00	
Land-Sea Power, Generator 3months @ \$893.88	2,681.63	
Deakin, Core Splitter, 2months @ \$171.00	342.00	
Purchase	627.00	8,960.98
Diamond Drilling: West-Gate, 17 holes, 1,295m @ \$66.09		85,581.15
Assays & Analyses: Acme Labs		
355 Core for Au & 32-Element ICP @ \$19.51	\$ 6,924.65	
13 Core for Tl,Hg & 30-Element ICP @ \$11.56	150.28	
2 Pulp for Zn @ \$8.43	16.86	
32 Pulp for 15-Element ICP @ \$11.56	369.92	
6 Pulp for W @ \$8.43	50.58	
2 Pulp for Mo @ \$8.43	16.86	7,529.15
Report Preparation:		7,291.00
<b>TOTAL DIAMOND DRILLING COST:</b>		<b><u>\$235,267.05</u></b>

DRILL HOLE PLOTTING  
 (Historical Data)

DATA PURCHASE: Emerald Gold Mines		\$ 16,050.00
DATA ENTRY & PLOTTING: ADW Engineering		14,732.72
DATA ENTRY & SUPERVISION: P&L Geological Service		6,766.96
PROFILE PLOTTING: Lynx Geosystems Inc.		7,650.00
ASSAYS & ANALYSES: Acme Labs		
68 Core for Au & 32-Element ICP @ \$19.51	\$ 1,326.41	
5 Pulp for 15-Element ICP @ \$11.56	57.79	
3 Pulp for W @ \$8.43	25.29	1,409.49
<b>TOTAL DRILL HOLE PLOTTING COST:</b>		<b><u>\$ 46,609.17</u></b>

**COST STATEMENT**  
**Trenching Cost**

<b>SALARIES &amp; WAGES</b>	1 pers., 2 mdays,	@ \$300.00		\$	600.00
<b>BENEFITS:</b>	20%				120.00
<b>FOOD &amp; ACCOMODATION:</b>	2 mdays,	@ 51.50			103.68
<b>TRAVEL:</b>	4WD PU, 2 days	@ 43.84			87.68
<b>SUPPLIES &amp; SUNDRY:</b>					96.50
<b>CONTRACTORS:</b>	Fred Critchlow Contracting Ltd. EX100				791.80
	Shoreline Transport: Mob/Demob				980.81
<b>ASSAY &amp; ANALYSIS:</b>	Acme Labs				
	3 Rock for Tl, Hg, & 30-Element ICP	@ 11.03	\$	33.09	
	3 Pulp for Pb, Zn, Cd	@ 10.36		31.07	
	2 Pulp for Ag	@ 8.43		16.86	
	2 Pulp for Zn	8.43		<u>16.86</u>	97.88
<b>REPORT PREPARATION:</b>					<u>1 200.00</u>
<b>TOTAL TRENCHING COST:</b>					<b>\$ 4 077.67</b>

**GEOCHEMICAL SURVEYS COST**

<b>SALARIES &amp; WAGES:</b>	2 pers., 3 mdays,	@ \$266.67		\$	800.00
<b>BENEFITS:</b>	@20%				160.00
<b>FOOD &amp; ACCOMODATION:</b>	2 mdays,	@ 51.50			103.00
<b>TRAVEL:</b>	4WD P/U., 3 days	@ 40.89			122.68
<b>ASSAYS &amp; ANALYSIS:</b>	ACME LABS				
	11 Rock for Au and 32-Element ICP	@ 16.52		181.73	
	8 Rock for 15-Element ICP	@ 15.65		125.23	
	11 Soil for Au & 32-Element ICP	@ 12.04		132.47	
	9 Pulp for Pb, Zn	@ 11.57		104.00	
	2 Pulp for Au	@ 10.36		20.72	
	2 Pulp for Pb, As	@ 9.39		18.79	
	1 Pulp for Pb, Zn, As			10.36	
	1 Pulp for As			<u>8.43</u>	734.20
<b>REPORT PREPARATION:</b>					<u>600.00</u>
<b>TOTAL GEOCHEMICAL SURVEYS COST:</b>					<b>\$2 519.92</b>

## TABLE III CORE STORAGE INVENTORY

Location: Logging Rack  
(See Fig. 13)

Side: "A"

<b>ROW6</b>								
<b>ROW5</b>	LJu97/8 50-74 26-50	LJu97/8 96-120.5 74-96	LJu97/8 144-167.1 120.5-144	LJu97/8 195.8-217.2 172.8-195.8	LJu97/8 242.2-266 217.2-295.3	LJu97/8 291-315 266.5-291	LJu97/8 239-263.8 315-239	LJu97/8 287.3-409.6 263.8-387.3
<b>ROW4</b>	L Ju97/6 368-373 246-7-368 346-7	Au97/1 27.2-50.9 0.0-27.2	Au97/1 75.2-98.8 50.9-75.2	Au97/2 0.0-25.4 Au97/1 98.8-115	Au97/2 25.4-45 Au97/3 0.0-24.7	Au97/3 48.5-59 24.7-48.5	Au97/4 25.6-27 0.0-25.6	Au97/5 32.2-47.8 0.0-23.2
<b>ROW3</b>	LJu97/3 05-27.4 27.4-51.8	LJu97/3 51.8-75.3 75.3-99.5	LJu97/3 99.5-122.9 122.9-147.2	LJu97/3 147.2-170.3 170.3-193.6	LJu97/3 193.6-217.4 217.4-241	LJu97/3 241-264.9 LJu97/3 264.9-288.4	LJu97/3 288.4-311.5 311.5-336.4	LJu97/3 336.4-360 360-383.2
<b>ROW2</b>	Du523 273-319 319-356	Ju2789 0.0-32 Ju2788 0.0-33 33-65	Ju2789 67-75 32-67 Ju2790 0.0-33	Ju2790 33-62 Ju2791 0.0-29 29-58	Ju2433 0.0-8 Ju2813 Ju2812 57-80	Ju3258 59-88 Ju2843 0.0-28 Ju2844 0.0-28	Ju2770 LAST 4" Ju2771 0.0-2 Ju2612/Ju2613 29-32/0.0-24 Ju2583/Ju2584 20-30/0.0-26	Ju3212 78.5-83.3 Ju2774 0.0-29 Ju2984 143-144
<b>ROW1</b>	TK14 291-316 266-291	TK14 343-368 316-392	TK14 392-417 368-392	TK14 441-466 417-441	TK14 497-532 466-491	TK14 532-556 556-581	TK14 581-607 607-632	TK14 680-707 632-656

# CORE STORAGE INVENTORY

Location: Logging Rack

Side: "B"

ROW6								
ROW5	LJu97/8 409.6-416							
ROW4	Au97/5 78.7-94.2 47.8-78.7	Au97/6 0.0-28 Au97/5 94.2-102	Au97/6 50.9-74.2 28-50.9	Au97/6 98.8-99.7 74.2-98.8	Au97/7 49.2-72.4 26-49.2	Au97/7 95.7-121.3 72.4-95.7	Au97/7 143.8-167 121.3-143.8	Au97/8 0.0-24 Au97/7 167-170
ROW3	LJu97/4 561.5-578 LJu97/5 0.0-26	LJu97/5 48-72.5 26-48	LJu97/5 95.3-118.9 72.2-96.3	LJu97/5 142-165.3 118.9-142	LJu97/5 189-212.3 165.3-189	LJu97/5 235-258 212.3-235	LJu97/5 281-304 258-281	LJu97/5 326-350 304-326
ROW2	LJu97/1 25-47 0.0-25	LJu97/1 70.5-95 47-70.5	LJu97/1 118.5-143 95-118.5	LJu97/1 167.5-192 143-167.5	LJu97/1 216.5-242.8 192-216.5	LJu97/1 267.5-282 242.8-267.5	LJu97/2 27-51 0.0-27	LJu97/2 51-74 74-79
ROW1	Ju1110 1132-1163 1107-1132	Ju1110 1192-1205 1143-1192	Ju1154 55-79 28-55	Ju1154 162-191 79-102?	Ju1154 218-260 191-218	Ju1154 319-341 260-290	Ju1154 393?-422? 343-371	Ju1154 457-501 422-457

# CORE STORAGE INVENTORY

Location: Logging Rack

Side: "C"

ROW6								
ROW5								
ROW4	LJu97/6 0.0-28.2 LJu97/5 350-374	LJu97/6 52-75 28.2-52	LJu97/6 99-122.4 75-99.	LJu97/6 145.8-169 122.4-145.8	LJu97/6 192.1-214.9 169-192.1	LJu97/6 237.7-259.8 214.9-237.7	LJu97/6 281.5-303.6 259.8-281.5	LJu97/6 324.9-346.7 303.6-324.9
ROW3	LJu97/3 383.2-407 407-431.1	LJu97/3 431.1-454.5 454.5-475.4	LJu97/3 475.4-497.1 497.1-520.5	LJu97/3 520.5-542.5 542.5-556	Ju97/4 5-26 26-49.7	Ju97/4 49.7-73.2 73.2-96.5	Ju97/4 96.5-120 120-144.5	Ju97/4 144.5-168 168-190.9
ROW2	Ju3214 32-61 0.0-29	Ju3215 51-80 Ju3214 119-122 Ju3215 0.0-24	Ju3220 0.0-31 Ju3215 80-109	Ju3265 4.5-6.1 Ju3220 33-61	Ju3265 58-87 30-58	Ju3267 25-56		
ROW1	TK14 755-781 701-731	TK14 905-930 880-905	TK14 927-952 930-953	TK14 977-1004 953-977	TK14 1029-1054 1004-1029	TK14 1080-1104 1054-1080	TK14 1132-1160 1104-1132	TK14 242-266 1160-1187

# CORE STORAGE INVENTORY

**Location:** Logging Rack

**Side:** "D"

<b>ROW6</b>								
<b>ROW5</b>								
<b>ROW4</b>	Au97/8 49.1-72.7 24-49.1	Au97/8 97.8-120 72.7-96.8	LJu97/7 0.0-28 Au97/8 120-130	LJu97/7 51.3-75 28-51.3	LJu97/7 75-98.6 98.6-123	LJu97/7 147-175.6 123-147	LJu97/7 194-216.6 173.6-194	LJu97/8 0.0-26.6 LJu97/7 216.6-227
<b>ROW3</b>	LJu97/4 214.9-235.8 109.9-214.9	LJu97/4 259-282 235.8-259	LJu97/4 305.9-226.6 282-305.9	LJu97/4 352-375 328.6-352	LJu97/4 398.5-421.3 375-398.5	LJu97/4 444.5-467.8 421.3-444.5	LJu97/4 467.8-491 491-513	LJu97/4 537-561.5 513-537
<b>ROW2</b>	LJu97/2 97-121 121-144.7	LJu97/2 144.7-168.8 168.8-193	LJu97/2 193-217.2 217.2-247.8	LJu97/2 247.8-274 274-297.9	LJu97/2 297.4-320.2 320.2-342.7	LJu97/2 342.7-366 366-392.5	LJu97/2	
<b>ROW1</b>	Ju1154 583-611 538-583	Ju1154 638-650 610-638						

# CORE STORAGE INVENTORY

Location: Shop Rack

Side: "A"

ROW6								
ROW5								
ROW4								
ROW3			Ju5331 Ju3520 Ju3538 197-227	33837  Ju3528 130-160 3512	3539 3539 Ju3543 3538 381-418	Ju3529  3538 346-380 Ju3529 38-60	3538 320-350 Ju35-- 0.0-15 Ju3541 123-152 Ju3538 3362	Ju3544/3534 106-117/29-56 Ju3534/3507 86-114 Ju3544/3509 57-86 /3509
ROW2	Ju3227 57-60 Ju3542 0.0-30 Ju3228 20-49	3509 242-246 Ju3145 Ju3228 49-52 Ju3229 0.0-17	Ju3362 223-252 Ju3361 54-56 Ju3362 0.0-22	J232 17-68 J232 J232 69-97	J229 93-150 J229 J2 J2	Ju3217 58-85 Ju3260 88-118 Ju3189 0.0-30	Ju3214 91-119 Ju3340 65-95	3509/3509 /3509 /3509 /174-204
ROW1	D85 298-332	D83 D85 408-432	D85 390-408 D85 333-356	D85 252-276 D82 -288	D82 241-265 D82 217-241	D82 171-193 D82 265-	D82 148-171 D82 193-7	D85 D85 75-100

# CORE STORAGE INVENTORY

Location: Shop Rack

Side: "B"

ROW6

ROW5

ROW4

ROW3

ROW2

ROW1

Du633	Du633	Du634	Du635	Du636	Du637
90-127	213-243	180-209	22-51	0-0-30	48-77
149-197	29-59	Du633	Du634	Du635	Du637
118-149	59-90	183-213	209-239	227-237	77-106
		243-271		Du635	Du636
				51-79	119



# CORE STORAGE INVENTORY

Location: Shop Rack

Side: "C"

ROW6								
ROW5								
ROW4								
ROW3								
ROW2	Du504 3547 Du514 127-160		Du505 -90  Du514	3547 275-305	Du497 Du519 130-189 Du520 166-195	Du494 270-300 Du519 81-129 Du519 231-261	Du494 360-388 Du497 185-214 Du494 330-360	Du514 28-62/54/28 /538-567 L7 518-566
ROW1	Du495 333-365	Du519 285-315 D84 419-444	Du536 135-167 Du519 280-290	Du520 Du520 Du497 67-90	Du519 20-55 Du520	Du497 120-150 Du495 359-360	Du415  D84 347-370	Du415/Du513 62-93/28-54 Du520/Du519 36-77/60-86 D84 318-381

# CORE STORAGE INVENTORY

Location: Shop Rack

Side: "D"

ROW6

ROW5

ROW4

ROW3

ROW2

V39  
421-440

ROW1

Du496	Du603	Du629	Du629	Du629	Du632	Du632	Du632
00-31	15-43	207-235	00-29	88-118	234-	83-112	55-84
96-111	Du603	297-326	60-88	178-207	Du632	141-172	27-55
58-93	42-70	235-265	266-297	149-178	141-172	30-59	112-141
	Du602				Du629		
	00-27				30-59		

end

# APPENDIX A

## Drill Core Logs

Au 97 - 1 to 8

LJ 97 - 1 to 9

Assays have been converted from 'ppm' or 'ppb' to '%' or 'gm/mt' as applicable.

Assays have been filtered as follows:

- values for Pb/Zn less than 0.1% are shown as '-'
- values for Mo/W less than 0.01% are shown as '-'
- values for Au/Ag less than 0.01 gm/mt are shown as '-'

SULTAN MINERALS INC.-DIAMOND DRILL CORE LOG

Property JERSEY

Hole No. AU97-1

O-WHIMSTER PRINTING LTD.

1387 m

Sheet 1 of 3

Started <u>MAR 14/97</u>	Lat <u>27486m/8157'</u>	Dep. <u>2748m/9015'</u>	Col. El. <u>4550'</u>	Logged by <u>L.D.</u>	Date <u>MAR. 17/97</u>
Completed <u>MAR 17/97</u>	Bearing <u>090°</u>	Dip <u>-30°</u>	Lgth. <u>35m</u>	Location <u>74G STOPE</u>	
Driller <u>A. Potapoff</u>	Core Size <u>BQ</u>	Remarks: <u>Test Au-Bi Zone</u>			

DESCRIPTION	FOOTAGE		CORE RECOVERY	SAMPLE No.	SAMP. WIDTH	ASSAY				
	FROM	TO				%	Zn	Ag	Au	Cd
0-2.07 CASING - 1st rubble, minor px/py	2.53	3.54		Au-1	1.01	.2	1.9	4.2		198
2.07-6.31 DOLOMITE - lt+dk gray, f.g., silic., fractured last 1m - no banding	3.54	4.72		Au-2	1.18					.11
-2.53-3.54 - py along brxx fractures										
-4.72-5.03 - minor sph.w., rusty py in bands	4.72	5.33		Au-3	0.61	.2	.8	6.3		
-5.03-5.85 - py, minor px to 10% in fractures + a long bands	5.33	6.31		Au-4	0.98					
6.31-7.38 MINERALIZED ZONE - upper contact sharp @ 45°	6.31	7.38		Au-5	1.06				.15	.25
-heavy py/px (py > px), rusty, vuggy areas with 30-40% dolo gangue. Dark green serp (?) areas.	7.38	8.50		Au-6	1.12					
-lower contact brxx @ ~90° tra	8.50	9.05		Au-7	0.55					
8.84-8.84 LIMESTONE - light - med gray, crystalline + massive to weakly banded. -occ. sm. blebs px/py										
-8.50-8.69 - massive px/py bleb @ low < tra										
-8.84-8.96 - limestone bleb in px/py @ 90° tra										
8.84-11.83 - MINERALIZED ZONE massive px/py. Upper contact @ 60° tra, lower contact wavy ~80° tra.	9.05	10.36		Au-8	1.31					
-9.05-9.66 - 80%px, 10%py, 10% gangue										
-9.66-10.36 - 70%px, 20%py, 10% gangue										
-10.36-10.73 - 70%px, 5%py, 5% cpy, 20% qtz gangue										
-10.73-11.83 - 90%px, 5%py, 5% gangue										
11.83-17.25 LIMESTONE light + dark grey, mottled to banded	11.83	13.66		Au-10	1.83					
-px + minor py bands xcut bedding at ~90° tra + ~15° in px/py	13.66	15.30		Au-11	1.64				.14	





SULTAN MINERALS INC. - DIAMOND DRILL CORE LOG

Property JERSEY

Hole No. Au97-2

WINDHAMSTER PRINTING LTD.

Sheet 1 of 2

Started <u>Mar 17/97</u>	Lat <u>81.57N (248m)</u>	Dep. <u>90.14N (2747m)</u>	Col. El. <u>1387</u>	Logged by <u>LD</u>	Date <u>Mar 18/97</u>
Completed <u>Mar 18/97</u>	Bearing <u>090°</u>	Dip <u>-95°</u>	Lgh. <u>13.72</u>	Location <u>74G Stope</u>	
Driller <u>A. Potapoff</u>	Core Size <u>B0</u>	Remarks: <u>Hit 80F Stope @ 13.72m.</u>			

DESCRIPTION	Dip	FOOTAGE		CORE RECOVERY	SAMPLE No.	SAMP. WIDTH	ASSAY			
		FROM	TO				%	Zn	Ag	Au
0-1.65 MINERALIZED ZONE - massive (75%) ps in rubbly core	12°	0.80	1.65	---	Au-29	1.35				
1.65-13.72 DOLOMITE - light grey with dark bands. Up to 1% py/ps as small blebs + along narrow bands running down core - with minor sph/gal increase silic down hole.	10°	1.65	3.17	---	Au-30	1.52				
-1.65-2.74 - dark banding, occ narrow xcutting qtz veinlet										
-2.74-3.17 - brown FeCb banding, slightly vuggy + oxidized										
-3.29-3.81 - 5-10% ps/py in dark blob elongated down core		3.17	4.36	---	Au-31	1.19				
-3.90-5.61 - v.f.g., lt grey dolo with fig. sulfides along narrow bands. ~1% ps/py gal/sph increasing to 5-10% for last 30cm.	5 to 10°	4.36	5.36	---	Au-32	1.00				
-5.61-5.85 - dark grey banded as at 1.65m.		5.36	6.43	---	Au-33	1.07			4.6	
-5.85-6.40 - grey-brown FeCb banding + a 4cm alteration halo around narrow qtz veinlet, xcut qtz veinlets have no alteration										
-6.40-7.86 - dolo w minor sulfides as at 3.90-5.61. From 6.92 sulfides increase around siliceous blob to 20%, mainly ps/py		6.43	7.86	---	Au-34	1.43			6.9	
-7.86-8.78 - occ py band to 1/2 cm @ 75° tra some white to clear calcite w the py.		7.86	9.14	---	Au-35	2.71			9.45	
-8.78-9.14 - minor ps in a blob with qtz-cb + dk green serp.										
-9.14-9.81 - 40% sulfides (py > sph > ps), wuggy in narrow bands at low tra.		9.14	9.75	---	Au-36	0.61			.9	4.5

SULTAN MINERALS INC.-DIAMOND DRILL CORE LOG


Property JERSEY

Hole No AU97-2

Sheet 2 of 2

L.WO-WHIMSTER PRINTING LTD.

Started	Lat	Dep.	Col. El.	Logged by <u>LD</u>	Date <u>MAR 18/97</u>
Completed	Bearing	Dip	Lgth.	Location	
Driller	Core Size	Remarks.			

DESCRIPTION	FOOTAGE		CORE RECOVERY	SAMPLE No.	SAMP. WIDTH	ASSAY				
	FROM	TO				r%	Zn	Ag	Au	
-9.81-10.21 - 40% red brown sph, 5% gal, 30% py, 25% gangue	9.75	10.27		Au-37	0.52	.6	8.4	28.0	.11	894 Cd
-10.21-11.92 - hairline bands with <<1% py/gal/sph @ 10-20° tra. Rare xcutting py/qtz veinlets 1/2cm @ 60° tra.	10.27	11.92		Au-38	1.65					
-11.92-13.72 - trace min. as above, increasing qtz veinlets (barren) roughly parallel at 45° tra  . Veinlets are hairline to 1/2 cm thick and 2-3 cm apart.	11.92	13.72		Au-39	1.80				.15	
*Note: Hit stope @ 13.72m, Should have missed by ~3.5m. The hole may have steepened due to drilling    to dg - or (more likely) the stope may have been slashed out & not updated on plans.										





















SULTAN MINERALS INC.—DIAMOND DRILL CORE LOG

Property Jersey

Hole No. Au 97-6  
Sheet 3 of 3

LENO-WHIMSTER PRINTING LTD.

Started	Lat	Dep.	Col. El.	Logged by <u>LD</u>	Date <u>Mar 28/97</u>
Completed	Bearing	Dip	Lgth.	Location	
Driller	Core Size	Remarks:			

DESCRIPTION	Dip	FOOTAGE		CORE RECOVERY	SAMPLE No.	SAMP. WIDTH	ASSAY	
		FROM	TO				g/t	g/t
- 23.53-23.62 - lamp dyke @ 75° tca								
- Abundant scheelite specks at 22.16-22.22, 23.01-23.04, 23.10-23.20, 25.30-25.48, 25.73-25.76, 26.37-26.43, 26.49-26.55, 28.13-28.16. Also as scattered single specks throughout skarny green areas. Px specks throughout mostly assoc w. actinolite or qtz veins								
24.51-25.12 - LIMESTONE - light + dk grey, crystalline, mod. banded, both contacts parallel to bdg. <1% px/py along beds except 20% @ 25.02-25.09.	75°	24.51	25.12		Au-93	0.61		
25.12-25.91 - SKARN - as above, mottled light green, hard, diopside, dark green actinolite, chlorite, calcite, grey qtz, rare garnet. Px, <1% maly blebs, good scheelite >1% for first 15cm & as isolated specks thru rest. Contacts gradational along bdg.		25.12	26.12		Au-94	1.00		
25.91-28.47 - SKARNY LIMESTONE - ~50% grey/white lst interbanded with pale green/white skarn. White tremolite wollastonite. Minor px for 1st 30cm & rare specks in skarn. Scheelite at 26.37, 26.43, 26.49-26.55, 28.13-28.16. Section is silicified.		26.12	26.79		Au-95	0.67		
- at 28.18 - .5m qtz vein contains 20% px, 10% py @ 30° tca		28.04	28.47		Au-96	0.43		
28.47-29.47 - LIMESTONE - contacts both at 70° tca, mod. silic, light grey, crystalline, massive to dark & light well banded.	70°							
29.47-30.48 - DOLOMITE - silic, white, minor med. grey, f.g., massive, trace sph in bands increasing to 5% for last 30 cm.		30.05	30.48		Au-97	0.43		













SULTAN MINERALS INC. - DIAMOND DRILL CORE LOG

Property JERSEY

Hole No. AU97-8

...NO-WHIMSTER PRINTING LTD.

Sheet 2 of 4

Started	Lat	Dep.	Col. El.	Logged by <u>LD</u>	Date <u>Mar 31/</u>
Completed	Bearing	Dip	Lgh.	Location	
Driller	Core Size	Remarks:			

DESCRIPTION	FOOTAGE		CORE RECOVERY	SAMPLE No.	SAMP. WIDTH	ASSAY			
	FROM	TO				Pb	Zn	Ag	Au
14.94-15.39 - Qtz with 30% pø blebs, minor py, cpy + shiny silvery Bi (may be galena) to 1%. Occasional vugs with small crystals, minor pale yellow carb. Dk green chl? with the sulfide	14.94	15.61		AU-138	0.67		.1	1.50	458 B.
-15.39-15.61 - 70% pø, minor py, tr cpy in siliceous grey dolomite. Sulfides in rough bands at low < tca. + some rare on x fractures.									
-15.61-16.58 - grey mottled dolo with 30% pø > sph > py, tr cpy in blebs + x-fractures. Minor qtz veinlets at 80° tra.	15.61	16.58		AU-139	0.97		.2		
- at 16.58 - contact wavy @ 35° tca									
16.58-18.90 - QUARTZ / GRANITE DYKE > 50% qtz, granite is entirely qtz, chlorite, actinolite.	16.58	18.90		AU-140	2.32		1.6	1.59	247 B.
-16.58-16.70 - 2% sm. specks scheelite along dyke margin									
-16.58-18.90 - 60% dk green, soft, crystalline chlorite-actinolite + 40% qtz. Minor pale yellow cb with the qtz + minor light green sericite with the chlorite, 2% pø, 1% py + tr. silvery Bi as blebs									
-18.90-19.66 <sup>60%</sup> pale green, f.g. sericitic granite, 10% dk green chlorite, 30% qtz and minor yellow cb - mottled with qtz as rough veins at low < tca.	18.90	19.66		AU-141	0.76			.21	
- @ 19.08 - 7.5cm qtz area with 1% soft silvery blebs (Bi, gal, moly)									
← most likely									
-19.66-20.21 - 70% qtz, 30% light + dk green chlorite/sericite. 1% moly/py/pø as sm. blebs. Few sm. vugs in qtz areas	19.66	20.21		AU-142	0.55				194 Mo





















## SULTAN MINERALS INC. -- DIAMOND DRILL CORE LOG

Property: Jersey

Hole No. LJu 97-2

Page 1 of 10

Started: 8 Feb 1997

Lat \* 6110N

Dep \* 7938E

Col. El.\* 4157

Logged by: EAL DATE: 11 Feb 97

Completed: 11 Feb 1997

Bearing ---

Dip ---90°

Lgth. 133.8m

Location: 4200 Dodger XCE

Driller: Allen Potapoff

Core Size: BQ

Remarks: Testing Lower Jersey Horizon \*Mine Coords (Imperial)

**Description**

Bdg

From To

CoreRecov

Samp No.

Samp/width

Pb%

Zn%

Au

Ag

Mo%

W%

other

g/mt

g/mt

**Fine Grained Granite**

no mafics

scattered flecks MoS2 <0.2%

contact with argillite @ 30°

0 2.16

1 2.16

LJH-9

1.16

-

-

0.01

-

0.01

-

-

**Siliceous Argillite**

intrusive penetrated a fracture (6mm) for ~50mm, totally healed contact

brown argillite with occasional blebs (13mm) qtz and/or calcite

lighter colour, harder, more silic from 3.26--3.96

2.16 3.96

80°

**Fine Grained Granite**

more mafics than 2--16, ~2%

tends to be pinker due to Kfeldspar

contact @ 3.96 70° CA

contact @ 7.31 ?(core broken)

scat flecks MoS2

qtz and fine xln py in some fract. (to 6mm)

3.96 7.31

3.96 5.64

5.64 7.31

LJH -10

LJH-11

1.68

5.5

-

-

0.01

0.01

-

-

-

-

-

-

-

-

-

-

**Argillite (siliceous)**

mainly brown banded

pale green @ contact with gran

occasional lighter coloured silic areas

7.31 12.03

70°













Description	Bdg	From	To	CoreRecov	Samp No.	Samp/width	Pb%	Zn%	Au g/mt	Ag g/mt	Mo%	W%	other
<b>HOLE NO. LJu 97-2 PAGE 8 of 10</b>													
(Weak Skarn cont'd)													
trends toward qtz-rich bdd - lt grey to whitish qtz pods 102.86-103.02													
py smears and xtal growths on fract surfs, 0.6-0.9m slickens - vary orientation, chloritic-talcy esp near 102.71, with assoc. py													
Samples		99.66	100.8		LJH-38	1.22	-	-	0.03	-	-	-	-
		102.1	103.2		LJH-39	1.07	-	-	-	-	-	-	-
<b>Quartzite</b>		103.2	103.5										
grey semi-translucent qtz, few 1-5mm mica bands minor py on fract surfs 45° to CA somewhat gradational to next unit													
<b>Weak Skarn - Altered Dolomite?</b>		103.5	106.6										
patchy, some similar to 99.66-100.8 fairly soft scratching, chloritic, micaceous mottled to v weakly bdd, harder silic patches and soft mica-chl bds-patches irregular, brown-green tinged greys grad change													
<b>Alt'd Dolomite (probably not, Mg low @ .8%)</b>		106.6	111.3										
wk bdd to mottled med to dark grey minor py smears on fract surfs few elongat blebs po 107.9-108.5 up to 1% po locally (15cm seen) strong dolomitic appearance 110.33-110.64 finely laminated and coarser, dk green mica, bdd fine brwnish bds (spha?) 110.33-110.61 one qtz vnt 2-3cm wide at 111.15	40° 50°												
cnct sharp to gran 45° to CA      Samples		107.8	108.9		LJH-40	1.22	-	-	0.01	-	-	-	-
		110.3	111.3		LJH-41	0.91	-	-	-	-	-	-	-
		111.3	113.1		LJH-42	1.83	-	-	0.03	-	-	-	-







**SULTAN MINERALS INC. -- DIAMOND DRILL CORE LOG**

<b>Property: Jersey</b>		<b>Hole No. LJu 97-3</b>				<b>Page 1 of 13</b>							
Started: 17 Feb 1997		Lat * 4957N	Dep * 7532E	Col. El.* 4240	Logged by: P. Grunenberg DATE: 20 Feb 97								
Completed: Feb 1997		Bearing ---	Dip ---90°		Lgth. 169.46m		Location: Near shop area -						
Driller: Pete and Allen Potapoff		Core Size: BQ		Remarks: *Mine Coords (Imperial)			Jersey A Zone East						
<b>Description</b>	<b>Bdg</b>	<b>From</b>	<b>To</b>	<b>CoreRecov</b>	<b>Samp No.</b>	<b>Samp/wdth</b>	<b>Pb%</b>	<b>Zn%</b>	<b>Au</b>	<b>Ag</b>	<b>Mo%</b>	<b>W%</b>	<b>other</b>
<b>HOLE NO. LJu 97-3 PAGE 1 of 13</b>									<b>g/mt</b>	<b>g/mt</b>			
<b>CASING</b>													
ROAD SURFACING		0	1.52										
<b>Massive Pyrite</b>		1.52	3.5										
minor visible 1-2mm wide bands/streaks sphal l ga, brwn sphal 15cm dolomite secn 2.89--3.05 with py and banded re-brwn sphal	55°												Cd
Sample		1.52	2.59		LJH-43	1.07	0.1	4.7	0.1	<0.3	-	-	0.01
		2.59	3.5		LJH-44	0.91	1.3	3.5	0.12	0.7	-	-	0.01
<b>Banded Dolomite-Sulphides</b>		2.59	3.5										
~50% py 50% Limey Dolomite (wk fizz) py bands <1--3cm wide, somewhat pddy shapes sphal-fine bnds and blebs to ~ <2% ? v. minor galene, indiv grains	55°												Cd
Sample		3.5	4.72		LJH-45	1.22	1.5	5.7	0.09	9.2	-	-	0.02
<b>Dolomite</b>		4.72	9.45										
banded white-brwn-grey, weak lime in places massive white 6.58--7.01 Recovery	4.87 35°												
minor py +/- sphal bands 7.62--8.23	55°			100%									
very minor py vaneers on fract's // to banding													
Samples		4.72	6.4		LJH-46	1.68	0.03	0.1	-	-	-	-	-
		6.4	7.62		LJH-47	1.22	-	0.1	-	-	-	-	-
		7.62	8.23		LJH-48	0.61	0.05	0.7	0.01	3.4	-	-	0.01
skarny towards next unit, gradational over 30cm 9.14--9.45		8.23	9.45		LJH-49	1.22	-	0.3	0.01	0.3	-	-	-













Description	Bdg	From	To	CoreRecov	Samp No.	Samp/wdth	Pb%	Zn%	Au	Ag	Mo%	W%	other
<b>HOLE NO. LJu 97- 3 PAGE 7 of 13</b>													
<b>Quartzite</b>	45°	69.43	70.04										
total silicification, wk bdd with minor mica, lt to med grey, similar to prev. qtzite minor <1% po +/- py somewhat gradational cntcts over 13cm													
<b>Argillite</b>		70.04	71.41										
same as 62.18--69.43 -brwn-grey micaceous minor po.													
<b>Quartzitic Argillite</b>		71.41	73.15										
another silicified sec'n?, with ~5% thin mica bdg, crackled fract. appearance very minor py 2 X 13cm, brwn mottle bdd @ and @ patchy gradational chg back to Arg	71.9 72.5												
<b>Argillite</b>	60°	73.15	84.58										
brwn-grey mottled to f bdd micaceous stron po 73.15-73.76 (to ~5%) as blebs and discontinous stringers silica rich 73.48--73.57, Sample (qztitic) - 75.22--75.28; 76.6--76.9; 83.17--83.33 slickensided fract surfs and broken core sec'ns several 75.28--81.07, actinolite -serp'd coated, x-cut and // bdg gradational chg, irregular to next													
		73.15	74.37		LJH-67	1.22	-	-	-	-	-	-	-



Description	Bdg	From	To	CoreRecov	Samp No.	Samp/width	Pb%	Zn%	Au	Ag	Mo%	W%	other
HOLE NO. LJu 97-3 PAGE 9 of 13									g/mt	g/mt			
<b>Argillite</b>		106.9	123.6										
mottled to wk bdd grey and brwny micaceous brwn areas	~60°												
siliceous grey to blue grey-- 107.44--107.74; 110.33--110.64; 111.85--112.09; 112.31--112.65													
3cm skarny (purple-brwn and bluegrey) @ with po blebs to 5 or 6% of 3cm sec'n	113												
increasing siliceousmottled text		117.3	117.7										
sporadic py/po concentrations, streaks and blebs													
Sample		116.8	118.3		LJH-71	1.46	-	-	-	-	-	-	-
alt'n halos adj to qtz +/- carb stringer vnlt few (near 119.71)													
mottled green-tan alt'd 120.18--120.57													
sericitic+/- chl.?													
minor green coated slicken surfs toward cntct core broken, pebbly		123.4	123.7										
Recovery		123.7	126.5	2.44\2.74									
<b>Argillaceous Quartzite</b>		123.6	128.3										
predom blue-grey dense qtz with minor bds and patches of brwn biofitic masses													
whit qtz vein		126.9	127.1										
minor assoc py		126.8	127.1		LJH-72	0.3	-	-	-	-	-	-	-
Sample													
core broken, slight talcy @ 126.48													
fracts, some slickened, // to bdg @	45-60°												
wispy, bdg @ 45° to CA near lower sect'n													
broken change, chloritic, slickensided													
<b>Weak Skarny Argillite</b>		128.3	129.5										
wk bdd to mottled, green-brwn; purplish-brwn (garnets?) very similar to prev. sec'ns of arg. with higher degree of mottled text, -<1%py/po													
Sample		128.4	129.5		LJH-73	1.16	-	-	-	-	-	-	-









## SULTAN MINERALS INC. -- DIAMOND DRILL CORE LOG

<b>Property: Jersey</b>		<b>Hole No. LJu 97-4</b>			<b>Page 1 of 8</b>								
Started: 24 Feb 1997		Lat *4877N	Dep * 7808E	Col. El.* 4267	Logged by: P.G./E.L.			DATE: 27 Feb 97					
Completed: 4 March 1997		Bearing ---Dip ---90°		Lgth. 176.16m			Location: 49 XCE						
Driller: Allen Potapoff		Core Size: BQ		Remarks: Near '96 survey point, DJ21 *Mine Coords (Imperial)									
<b>Description</b>	<b>Bdg</b>	<b>From</b>	<b>To</b>	<b>CoreRecov</b>	<b>Samp No.</b>	<b>Samp/wdth</b>	<b>Pb%</b>	<b>Zn%</b>	<b>Au</b>	<b>Ag</b>	<b>Mo%</b>	<b>W%</b>	<b>other</b>
<b>HOLE NO. LJu 97-4 PAGE 1 of 8</b>									g/mt	g/mt			
<b>Casing - road crush and broken bedrock (Dolo)</b>		0	1.52										
<b>Orange-Grey Dolomite</b>		1.52	3.2										
slightly limy	65°												
or-grey bdd to massive finely x-talline, light orange (top and bottom sec'ns bdd)													
pocky leached cavities in core 1.89--2.74													
minor wavy aspect to bdg, poor boudin devel'd noted at 2.95													
minor py bds, few, 2.74--3.2; 0.3-0.5cm width													
gradational chg to next sec'n over 30cm, decrease orang colour, increase py													
<b>Black/White Dolomite</b>		3.2	4.54										
roughly bdd to mottled		3.2	4.54		LJH-81	1.34	-	-	-	0.3	-	-	-
mottled 4.14--4.51 brxx text, some ang frags													
elongate 1-2cmD., rough orientation alignm't 60° to CA,													
rounding of frags apparent towards 4.54													
py, warpy rough bds and intercon'd pods thr-out,													
10-15% of core, bds py roughly 65-70° to CA													
fairly hard, poss wk silic													
sharp chg to next unit, -carbonaceous, possible slickensided cntct (graphitic)													
<b>Massive Pyrite</b>		4.54	5.06										
rough bdd ~4.6 with black hard fg material,													
apparent carbonaceous silica (black streak)													
sharp decrease py at 5.06 to next sec'n -Sample		4.54	5.06		LJH-82	0.52	3	0.1	0.15	9.5	-	-	-









Description	Bdg	From	To	CoreRecov	Samp No.	Samp/wdth	Pb%	Zn%	Au g/mt	Ag g/mt	Mo%	W%	other
HOLE NO. LJu 97- 4 PAGE 5 of 8													
<b>Argillite</b>		46.87	67.35										
fine laminated, brwn micaceous	65°												
patchy light colored grey to grey-green	70°												
areas related to silicif'n/alt'n..													
micro faulted offsets of 1-3cm seen in vnlt's near													
47.85 and 49.07 Sample		49.68	50.59		LJH-97	0.91	-	-	-	-	-	-	-
qtz rich segment @ 49.98, warpy white													
qtz vnlt 3-4cm wide - 49.92-50.01													
patchy py growths on fract surfs													
few green colored qtz-py vnlt's (1-2mm)													
at 10-15° to CA - 50.9--51.2, qtz-py+/-actinolite													
truncated (sheared) mottled bdg common through unit,													
brwn-grey oblong patchy ntwk., remnant bdg?													
minor po along bds or cleavage planes, and in													
x-cutting 1-2mm stringer qtz (few) =<< 1% po													
only in some 30-45cm sec'ns (e.g. near 61.26)													
silicified 61.57--62.48, brittle with mnor stckwk-like													
vnlt's, minor py in vns and minor green-actino bearing vnlt													
~15-20° to CA Sample		61.11	62.54		LJH-98	1.43	-	-	-	-	-	-	-
REC's				100%									
<b>Silic'd Grey Banded Argillite</b>	80°	67.36	134.5										
mostly grey, some brwn remnant mottles -	70.6												
broken, grey silic pyr dissem. Sample		67.66	68.73		LJH-99	1.07	-	0.01	-	-	-	-	-
silic'd grey well bdd to 74.67, minor contort'n	74.7												
occas 1mm qtz vn L bdg, tand colrd altrn													
feathers out from vein up to 25mm Sample		73.15	74.15		LJH-100	1	-	-	0.1	-	-	-	-
occas as above but // bdg 1 per 5 feet													
py 6mm // bdg 73.56-74.06													
py 2-3cm L bdg 74.09--74.24													
blotchy mottled grey brwn silic'd to	84.1												
vague bdg; fine 1mm vnlt's buff colored calc and qtz,													
feather pattern to	76.9												
grey silic'd bdd, som brxn to	78.1												
white qtz mixed with grey -77.81--78.02 -Samples		76.04	76.5		LJH-101	0.46	-	-	-	-	-	-	-
		76.99	78.05		LJH-102	1.07	-	-	-	-	-	-	-

Description	Bdg	From	To	CoreRecoy	Samp No.	Samp/width	Pb%	Zn%	Au	Ag	Mo%	W%	other
HOLE NO. LJu 97-4 PAGE 6 of 8													
									g/mt	g/mt			
blotchy mottled grey grwn silic'd to occas 1mm calc fract, L bdg	84.1	80°											
mostly mottled grey silic'd (brwn is minor) to 94.03 bdg generally vague -86.86		80°											
mainly grey massive, fine 1mm pyr 86.1--86.95 Sample			86.1	86.95	LJH-103	0.85	-	-	-	-	-	-	-
feathery buff filling, variable orient'n 88.08--89.61 blebs of white qtz less silic'd - 90.22--90.67 1mm pyr 70° to bdg 90.86		70°											
scat pyr blebs and bds in grey silic'd Sample			91.34	91.83	LJH-104		-	-	-	-	-	-	-
silic'd bry bdd vague bdg, occas blotch brwn, scat 1mm blebs of py/po, not as silic'd (softer) to grey-green with buff blotches, silic'd in places to Sample		70°	94.03	95.7									
actin? in 6mm fract L bdg, tend to be lensey to Sample	98.6 99.8	65°	96	96.74	LJH-105	0.74	-	-	-	-	-	-	-
grey green silic'd (some diops) to 100.12 grey, buff, brwn mottled, silic'd to 102.41 6mm mottles of qtz with vague boundaries grey brwn mottles with vague edges to 103.93 fluoresc. yellow with occas blue white Sample		70°	99.05	99.82	LJH-106	0.77	-	-	-	-	-	-	-
25mm qtz to 107.16 broken core, talcy fract 107.89--108.81 grey, green brwn intermit silic'n, vague bdg to 115.21 grey, brwn bdd, silic'd to 115.21 3mm discontinuous py in fract sub // bdg Sample		80° 70° 60°	103.5	105.4	LJH-107	1.86	-	-	-	-	-	0.04	-
grey brwn mottled and bdd, some silic'd areas to 119.99 brwn bdd to 120.21 grey white siliceous mottles with brwn rims to 120.54 leached leuco intrus to 120.79 inclusion of brwn arg fg grey grn, no bdg to 121.24 hairline tan fract fillings @ 60° to CA			105.4	106.5	LJH-108	1.86	-	-	-	-	-	0.01	-
			113.9	115.2	LJH-109	1.22	-	-	-	-	-	-	-



















Description	Bdg	From	To	CoreRecov	Samp No.	Samp/width	Pb%	Zn%	Au g/mt	Ag g/mt	Mo%	W%	other
HOLE NO. LJu 97-6 PAGE 2 of 5													
(Limestone, cont'd)													
fg with hairline py bds (<<1%) 24.62--24.9 Sample		24.99	25.97		LJH-138	0.97	-	-	-	-	-	-	-
po/py in bds to 1cm ~1-2% 24.99--25.97	50°												
xtalline massive white Ls to 26.7													
skarny, grn bds with 1-2% po 27.09--27.58 Sample	45°	26.97	27.58		LJH-139	0.61	-	-	-	-	-	-	-
grey/white xtallin Ls with to 28.2													
7cm bd of massive po, and smaller bds po Sample		27.58	28.25		LJH-140	0.67	0.01	-	-	-	-	-	-
<b>Skarn</b>		28.22	51.84										
lt and dk green, diop and chl?; white calc, grey and white silic some limey patches for 30cm Sample		28.25	29.62		LJH-141	1.37	-	0.03	-	-	-	-	-
po blebs to ~1-2% locally throughout white-grey-lt/dk green blotches 29.96--30.66 silica/epidote/actin v minor po gry, minor grn skarn-some tremolite 30.66--31.15 Sample		32.85	33.53		LJH-142	0.68	-	-	-	-	-	-	-
xtal faces to 1cm vis calc on slip @ 35° CA @ 31.36 black (chl/carb) and grey (limey) mottle 34.29--34.9 w po to 10-20% in black areas Sample		34.32	35.14		LJH-143	0.82	-	-	-	-	-	-	-
po incr to 10% in dk bds 36.6--37.3 epidote present SAMPLES: 36.6 37.3					LJH-144	0.7	-	-	-	-	-	-	-
grey Ls bleb with <1% sph and po 39.71--39.96		38.43	39.47		LJH-145	1.04	-	-	-	-	-	-	-
have po to 10% - 39.32; 40.32--40.84; 40.99--41.3; 41.97--42.27; 43.07		39.44	40.02		LJH-146	0.55	-	-	-	-	-	-	-
25mm serp/cc slip bd @ 80° CA - 44.41		40.17	40.84		LJH-147	0.67	-	-	-	-	-	-	-
2cm sph bleb w occ specks - 44.83		40.84	42.36		LJH-148	1.52	-	-	-	-	-	-	-
sph band @ 40° - 1cm w gal and hairline 45.41--45.66		44.77	45.75		LJH-149	0.98	-	-	-	5.7	-	-	-
sph/gan of fract to ~1% sph and .5% gal in mottled		45.75	47.67		LJH-150	1.92	-	-	0.02	-	-	-	-
grey/green skarn		47.67	48.09		LJH-151	0.42	-	-	-	-	-	-	-
po blebs to 5% to 47.7		48.09	48.98		LJH-152	0.89	-	-	-	-	-	-	-
20% po, 1% sph, 1% gal; to 48.03		48.98	49.83		LJH-153	0.85	-	-	-	-	-	-	-
dolomitic, narrow po/py - 48.37--48.98		49.83	50.96		LJH-154	1.13	-	-	-	-	-	-	-
(2% total Su's) sph/gal band													
20% po blebs and bds (minor sph/gal) to 49.5 ~30°													
massive po (minor py) to (-Sample) 49.7		51.51	51.9		LJH-155	0.39	-	-	-	-	-	-	-









## SULTAN MINERALS INC. -- DIAMOND DRILL CORE LOG

Property: Jersey

Hole No. LJu 97-7

Page 1 of 5

Started: 29 March 1997

Lat \* 5425N

Dep \* 8356E

Col. El.\* 4321

Logged by: EAL DATE: 1 April 97

Completed: 2 April 1997

Bearing-239°Az

Dip --- 44°

Lgth. 69.19m Location: 52E Hdg at S. End Main E Zone

Driller: Allen Potapoff

Core Size: BQ

Remarks: Testing area adjacent to ddh 94-08 (\*Mine Coords-Imperial)

**Description**

Bdg	From	To	CoreRecov	Samp No.	Samp/width	Pb%	Zn%	Au	Ag	Mo%	W%	other
-----	------	----	-----------	----------	------------	-----	-----	----	----	-----	----	-------

HOLE NO. LJu 97-7 PAGE 1 of 5

**Rubble**

0 1.52

**Skarn**

1.52 2.13

green diop

strong blue/white flouresc 6cm immed above cntct

**Limey Dolomite**

2.13 4.26

fg creamy-ink with dk grn chlor mottles and streaks

**Silicified Argillite**

4.26 7.31

vfg hard, grey with occas lighter grey and brwn streaks

occas bdg relict arg bdg

45°

3mm qtz @ 90° @ 4.72 (not continuous across core)

irreg 2-3cm qtz sub // CA @ 6.09

py/po as fg distinct xtals in blebs and bands and dissems (<5%)

Sample

4.88 7.31

LJH-164

2.43

- 0.02

0.01

-

-

-

-

**Dolomite**

7.31 8.23

grey fg vague bdg; some blue grey sharp cntct with sil arg, healed brx

4mm band calcitic mat'l @ 80°

slicken 1mm shear @ 7.77 @ 50°

mat'l under shear is limey with some dolo x'ns to 8.23 mg speckled grey and white Ls 8.23-8.32















Description	Bdg	From	To	CoreRecov	Samp No.	Samp/width	Pb%	Zn%	Au g/mt	Ag g/mt	Mo%	W%	other
<b>HOLE NO. LJu 97- 8 PAGE 3 of 8</b>													
<b>Skarn</b>		40.35	41.39										
pale green vfg with occas dk green chlor 1mm vnl or cluster, some grey silic also													
<b>Silicified Argillite</b>		41.39	45.23										
vfg hard grey with wispy brwn remnants arg occas qtz-py mass to 2cm occas qtz-py veinlet to 5mm grey with erratic fracture fillings of chlor - 44.04-45.23 sharp contact @ 75°													
<b>Limestone</b>		45.23	47.85										
silic white, hard 45.23-45.38 grey speckled, occas white boudin of qtz to 3mm may follow bdg 2-3mm blebs garnet in grey Ls 46.23-47.06 fluorescent @ skarn ~6cm ~1% WO3 cntct with green skarn @ 50° @ 47.06 silic'd Ls 47.06-47.85 light green color, vfg 2mm qtz vnlt and one 7mm clear qtz @ 45° near cntct Sample		46.57	47.85		LJH-179	1.28	-	-	-	-	-	-	-
<b>Intrusive</b>		47.85	58.21										
sharp cntct @ 45° mainly fine-mg mafic-poor, slightly pinkish color occas chlorite bleb occas fleck muscovite Samples		47.85	50.59		LJH-180	2.74	-	-	-	-	-	-	-
		50.59	53.46	1.22\3.05	LJH-181	3.05	-	-	-	-	-	-	-
<b>CORE TUBE MISLATCH; ~1.83M OF CORE GROUND</b>													
		53.46	56.69		LJH-182	3.05	-	0.02	-	-	-	-	-
rusty small vugs in angular fract'd apl 56.69-57.48		56.69	57.48		LJH-183	0.79	0.02	0.03	-	0.8	-	-	-



Description	Bdg	From	To	CoreRecov	Samp No.	Samp/width	Pb%	Zn%	Au g/mt	Ag g/mt	Mo%	W%	other
<b>HOLE NO. LJu 97-8 PAGE 5 of 8</b>													
<b>Dolomite</b>													
blue grey bdd to	67.4	40°	66.75	76.32									
diops actinolite sk to 67.45 Sample			67.45	68	LJH-186	0.55	-	-	0.01	-	0.02	-	-
white fg aplite with flecks muscovite to	68												
white fg dolo to	72.8												
flecks brwn --?-- rusty? to	73.9												
Sample			72.84	73.97	LJH-187	1.13	-	-	-	-	-	-	-
limey dolo to	74.7												
limestone to	75.3												
dirty streaky brwn and grey													
1cm clear qtz @ 74.73 @ 60° Sample			74.73	77.87	LJH-188	3.14	-	-	0.04	-	-	-	-
grey fg dolo	76.3												
Fluoresce @ 75.28 <1% WO3													
<b>Siliceous Dolomite</b>													
white to	76.5		76.32	78.18									
blue grey to	77.3												
low angle to core shear with talcy gouge: 15° CA	77.6												
limestone to	78												
silic grey fg dolo	78.2												
fluoresc @ 77.72, in po/py in diops													
<b>White VFG Aplite ?</b>													
looks identical to 94-08 Au zone			78.18	78.48									
flecks of brwn and grey mineral													
qtz-like appearance, but granular													
cnict @ 75° Irregular Sample			78.18	78.48	LJH-189	0.3	-	-	-	-	-	-	-
<b>Intrusive</b>													
fg grey aplite (no mafix) 81.99			78.48	83.21									
dense, 15-20cm core lengths Sample			78.45	81.68	LJH-190	3.2	-	-	-	-	0.01	-	-
fg grey aplite minor fine mafix and occas grey sulfide	83.2												
brwn arg (silicified) inclusion 82.44-82.75													
along one half of core Sample			81.68	83.21	LJH-191	1.53	-	-	-	-	-	-	-





Description	Bdg	From	To	CoreRecov	Samp No.	Samp/wdth	Pb%	Zn%	Au g/mt	Ag g/mt	Mo%	W%	other
HOLE NO. LJu 97-8 PAGE 8 of 8													
<b>Silicified Argillite</b>		117.6	123.5										
brwn minor silc'n 117.59--118.41													
granular white qtz, some actinolite to 118.56													
sharp cntct with gouge @ 45°													
mixture of fg grey green Ls and bgbd to 119.11													
blue grey bdd 119.11--119.48													
white fg limey dolo with green blobs of													
chlorite (to 3mm) 119.87													
fg grey speckled Ls 120.08													
brwn arg bdd 120.39													
grey green Ls 120.69													
white silic dol? with muscovite 121.15													
similar to 115.82													
lower cntct irreg but tight ~80°													
fg green diops with pinkish bds 121.52													
mixture diops/qtz/garnet /chlor/po/py 120.07													
Sample		121.5	122.1		LJH-203	0.55	-	-	-	-	-	-	-
brwn-grn bdd argillite	20°												
<b>Skarn</b>		123.5	124.9										
lt green diops with pink rhodon bds to 124.05													
mixture diops/garnet to 124.93													
5cm calc @ 65° @ 124.93													
<b>Silicified Argillite</b>		124.9	126.8										
brwn arg with grey mottles to 3cm													
<b>E.O.H. 126.79</b>													









# APPENDIX B

## Assay Certificates



GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0798 Page 1

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
LJH-1	<1	24	200	671	.3	2	<1	430	2.02	17	<5	<2	<2	322	1.2	<2	<2	2	36.36	.007	5	1	.66	42	.01	6	.23	.02	.12	<2	<5	1	.01	
LJH-2	1	12	8	67	<.3	29	14	131	2.10	<2	<5	<2	14	19	<.2	<2	<2	37	1.66	.030	23	55	.71	21	.27	9	1.23	.01	.32	<2	<5	2	.02	
LJH-3	1	4	6	22	<.3	5	3	356	.93	2	<5	<2	9	370	<.2	<2	<2	9	18.67	.015	24	12	8.32	113	.06	26	.75	.04	.69	<2	<5	<1	.01	
LJH-4	<1	29	7	90	<.3	43	20	193	4.54	<2	<5	<2	11	47	.4	<2	2	44	2.39	.029	18	69	1.30	39	.31	4	3.23	.09	.64	<2	<5	<1	<.01	
LJH-5	1	32	6	70	<.3	41	14	173	3.60	<2	<5	<2	11	118	<.2	<2	<2	41	2.98	.032	21	66	.93	38	.26	6	2.93	.12	.48	<2	<5	1	<.01	
LJH-6	1	22	14	108	<.3	42	18	195	4.30	14	<5	<2	6	38	<.2	<2	<2	37	.70	.019	19	49	1.30	37	.12	9	2.11	.02	.48	<2	<5	<1	.01	
LJH-7	<1	36	8	68	<.3	55	23	815	5.16	13	<5	<2	7	178	.3	<2	3	94	5.97	.252	38	42	2.13	241	.12	6	2.37	.04	.46	<2	<5	<1	.01	
LJH-8	4	34	<3	68	<.3	36	14	723	3.35	<2	<5	<2	23	138	<.2	<2	2	47	3.05	.071	26	62	1.67	247	.21	11	2.27	.09	.66	4	<5	1	.02	
LJH-9	165	8	13	9	<.3	4	1	151	.49	<2	14	<2	17	6	<.2	<2	<2	4	.13	.004	8	13	.09	20	.02	<3	.30	.04	.14	2	<5	<1	.01	
LJH-10	26	2	18	6	<.3	2	<1	100	.29	<2	14	<2	14	5	<.2	<2	<2	<1	.09	.003	7	15	.03	14	<.01	3	.19	.04	.10	4	<5	1	.01	
LJH-11	29	3	19	5	<.3	1	<1	112	.37	4	19	<2	17	5	<.2	<2	<2	<1	.07	.002	8	14	.04	15	<.01	3	.20	.04	.09	2	<5	<1	.01	
LJH-12	21	3	14	5	<.3	2	<1	342	.32	<2	21	<2	21	8	<.2	<2	<2	<1	.20	.003	7	14	.03	12	<.01	3	.16	.04	.08	4	<5	1	.01	
RE LJH-12	24	4	14	6	<.3	1	<1	348	.32	<2	20	<2	21	8	<.2	<2	2	<1	.20	.002	8	13	.03	6	<.01	<3	.17	.04	.09	4	<5	<1	.02	
RRE LJH-12	28	4	11	6	<.3	4	1	374	.38	<2	20	<2	20	9	<.2	<2	<2	1	.20	.003	7	15	.04	9	<.01	<3	.20	.05	.11	3	<5	<1	.01	
LJH-13	1	9	5	43	<.3	15	7	722	2.32	<2	<5	<2	12	27	<.2	<2	<2	25	.75	.072	22	34	.51	44	.06	5	1.18	.02	.32	3	<5	<1	<.01	
LJH-14	2	9	9	60	<.3	15	9	292	2.75	2	<5	<2	20	16	<.2	<2	<2	39	.26	.056	41	53	.66	84	.12	<3	1.67	.01	.62	<2	<5	<1	.03	
LJH-15	2	15	<3	39	<.3	19	8	592	1.76	2	<5	<2	5	34	<.2	<2	<2	31	1.21	.043	14	34	.45	70	.09	<3	1.18	.04	.30	5	<5	2	.04	
LJH-16	3	5	8	18	<.3	4	3	552	.65	2	17	<2	13	10	<.2	<2	<2	8	.16	.025	13	19	.15	24	.02	<3	.47	.03	.14	<2	<5	1	.02	
LJH-17	2	3	10	6	<.3	3	1	727	.27	<2	16	<2	10	4	<.2	<2	<2	<1	.09	.003	3	15	.02	9	<.01	<3	.16	.04	.09	4	<5	1	<.01	
LJH-18	2	31	6	25	<.3	17	8	1724	3.36	4	<5	<2	15	68	<.2	<2	5	12	1.95	.360	24	22	.49	44	.02	7	.92	.02	.31	2	<5	<1	.01	
LJH-19	1	54	3	103	<.3	20	20	706	6.00	2	<5	<2	6	18	<.2	<2	<2	81	.59	.125	14	44	.92	212	.22	3	2.61	.03	1.28	2	<5	2	<.01	
LJH-20	1	22	3	102	<.3	22	16	763	5.25	<2	<5	<2	8	58	.3	2	<2	69	1.23	.181	20	49	.92	281	.36	<3	3.02	.12	1.51	2	<5	2	.03	
LJH-21	1	28	<3	59	<.3	37	17	399	3.82	<2	<5	<2	8	27	<.2	<2	4	57	.51	.055	18	48	.82	100	.16	3	2.40	.08	.79	2	<5	<1	.05	
LJH-22	2	78	<3	63	<.3	44	27	405	5.87	<2	<5	<2	6	58	<.2	<2	7	57	1.19	.055	12	41	.90	122	.16	6	3.37	.29	.83	<2	<5	<1	.01	
LJH-23	1	19	<3	62	<.3	26	13	675	3.39	2	<5	<2	6	17	<.2	<2	<2	50	.72	.078	18	41	.95	113	.16	<3	1.96	.04	.93	3	<5	1	<.01	
LJH-24	122	9	<3	25	<.3	7	3	341	1.20	<2	<5	<2	3	17	<.2	<2	<2	17	.64	.210	16	24	.25	43	.07	3	.58	.01	.24	4	<5	1	.02	
RE LJH-24	128	9	<3	24	<.3	7	2	333	1.18	4	<5	<2	2	17	<.2	<2	<2	17	.63	.209	16	22	.24	50	.07	5	.56	.01	.24	5	<5	1	.02	
RRE LJH-24	118	7	3	25	<.3	5	3	346	1.19	2	<5	<2	3	17	<.2	<2	<2	17	.65	.212	17	28	.25	45	.07	5	.57	.01	.25	8	<5	1	.01	
LJH-25	3	26	<3	63	<.3	32	19	816	4.29	<2	<5	<2	5	12	<.2	<2	<2	56	.40	.107	19	49	.88	128	.20	3	2.19	.01	1.24	<2	<5	1	.02	
LJH-26	2	16	3	55	<.3	26	13	794	3.45	6	<5	<2	7	30	<.2	2	<2	35	.79	.131	23	34	.68	77	.11	3	1.37	.02	.65	4	<5	1	<.01	
LJH-27	8	38	<3	44	<.3	27	13	478	3.07	<2	<5	<2	6	38	<.2	<2	2	41	.79	.191	24	40	.57	90	.19	3	1.48	.03	.78	3	<5	<1	<.01	
LJH-28	55	7	7	51	<.3	23	11	561	3.08	<2	<5	<2	5	15	.3	<2	3	54	.43	.135	20	41	.71	106	.20	3	1.72	.02	.95	4	<5	<1	<.01	
LJH-29	3	18	<3	71	<.3	33	19	749	4.61	<2	<5	<2	6	16	<.2	<2	<2	74	.45	.088	19	55	1.05	122	.24	<3	2.48	.03	1.36	<2	<5	1	<.01	
LJH-30	8	23	<3	71	<.3	32	21	756	4.82	<2	<5	<2	5	15	.2	<2	3	75	.41	.072	17	53	1.06	136	.22	3	2.64	.03	1.41	2	<5	1	.01	
LJH-31	2	29	<3	36	<.3	19	11	534	2.73	22	<5	<2	5	24	.3	<2	3	25	.53	.107	16	25	.51	53	.05	6	1.00	<.01	.44	2	<5	1	<.01	
LJH-32	28	14	4	39	<.3	20	10	662	2.65	2	<5	<2	5	24	<.2	3	<2	29	.49	.089	18	33	.54	42	.07	3	1.00	.01	.39	5	<5	1	<.01	
STANDARD C2/AU-1	20	60	38	153	6.8	72	36	1133	4.00	45	18	8	35	53	19.1	17	23	71	.53	.105	41	64	.95	201	.08	29	1.94	.05	.15	12	<5	4	3.24	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: FEB 24 1997 DATE REPORT MAILED: Feb 27/97 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS  
 All results considered the confidential property of the client. Acme assumes no liabilities for actual cost of the analysis only. Data FA



ACME ANALYTICAL

## Sultan Minerals PROJECT JERSEY FILE # 97-0798

Page 2



ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	gm/t
LJH-33	2	24	4	41	<.3	18	12	566	3.09	185	<5	<2	5	34	<.2	3	3	18	.68	.089	17	24	.60	62	.05	8	.89	.01	.36	<2	<5	1	.01	
LJH-34	1	34	<3	66	<.3	34	19	911	4.79	<2	<5	<2	5	14	.2	<2	3	53	.32	.054	17	50	.98	81	.17	3	1.95	.03	1.07	2	<5	1	.04	
LJH-35	15	29	3	63	<.3	31	17	1163	4.60	309	<5	<2	6	49	<.2	6	4	13	.66	.063	15	18	.84	57	.01	10	.79	.01	.39	<2	<5	1	.02	
LJH-36	15	31	<3	22	.3	30	11	598	2.43	1008	<5	<2	2	77	<.2	9	2	4	.81	.021	6	22	.44	29	<.01	9	.26	<.01	.16	6	<5	<1	.05	
LJH-37	4	20	<3	11	<.3	11	5	238	1.31	438	<5	<2	<2	37	.2	2	<2	2	.47	.066	5	21	.16	11	<.01	5	.21	<.01	.08	3	<5	<1	.04	
LJH-38	1	27	3	58	<.3	37	17	1047	4.19	422	<5	<2	5	39	<.2	3	<2	9	.47	.054	15	17	.67	44	<.01	9	.60	<.01	.31	3	<5	<1	.03	
LJH-39	8	47	<3	41	<.3	42	17	805	3.76	251	<5	<2	4	31	<.2	3	5	10	.43	.072	12	18	.48	48	.01	10	.69	<.01	.27	2	<5	1	<.01	
LJH-40	1	27	<3	59	<.3	35	16	567	4.50	3	<5	<2	6	29	.2	<2	3	64	.44	.098	17	64	.93	90	.19	3	2.40	.02	.87	3	<5	<1	.01	
RE LJH-40	1	26	<3	56	<.3	30	16	549	4.34	<2	<5	<2	6	28	<.2	<2	2	62	.43	.095	17	62	.89	83	.18	5	2.31	.03	.84	3	<5	<1	.02	
RRE LJH-40	1	30	<3	60	<.3	36	20	577	4.50	3	<5	<2	6	30	<.2	<2	5	62	.46	.094	18	62	.92	91	.19	3	2.41	.03	.88	2	<5	<1	.01	
LJH-41	20	36	<3	47	<.3	21	14	536	3.71	23	<5	<2	3	23	.2	3	4	37	.64	.196	15	45	.83	57	.10	<3	1.68	.01	.52	5	<5	<1	<.01	
LJH-42	4	7	10	13	<.3	3	3	262	.60	<2	12	<2	26	12	<.2	<2	2	2	.27	.007	14	14	.07	16	.01	4	.26	.04	.11	4	<5	<1	.03	
STANDARD C2/AU-1	19	57	36	146	6.5	71	36	1089	3.81	44	21	7	35	50	19.3	16	18	67	.51	.107	40	60	.94	189	.08	28	1.87	.06	.14	11	<5	1	3.25	

Sample type: CORE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0884 Page 1

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
LJH-43	13	6	8534	38143	1.0	40	2	71	16.72	64	<5	<2	<2	12	93.4	8	3	5	1.32	.004	<1	<1	1.45	7<.01	<3	.01	.01	<.01	2	<5	<1	.10	
LJH-44	16	9	11424	29662	.7	61	3	48	16.96	83	<5	<2	<2	11	67.1	17	4	3	1.09	.005	<1	<1	1.18	6<.01	<3	<.01	<.01	<.01	7	<5	<1	.12	
LJH-45	17	13	11429	42160	8.6	50	4	388	16.08	91	<5	<2	<2	40	168.2	17	<2	13	5.18	.006	<1	<1	5.97	12<.01	<3	.03	<.01	.01	<2	<5	<1	.09	
LJH-46	1	1	258	1265	<.3	2	1	680	.71	5	<5	<2	4	101	6.0	<2	<2	1	24.84	.021	3	2	11.23	25<.01	<3	.07	<.01	.04	7	<5	<1	<.01	
LJH-47	1	1	31	1116	<.3	1	1	431	.43	3	<5	<2	2	104	7.7	<2	<2	1	24.63	.052	3	4	11.21	33<.01	3	.11	<.01	.06	<2	<5	<1	<.01	
LJH-48	2	2	549	6209	.8	5	2	371	2.93	8	<5	<2	<2	133	47.2	<2	<2	2	22.76	.070	3	2	9.27	104 .01	<3	.18	.01	.15	<2	<5	<1	.01	
LJH-49	2	4	37	3340	.3	2	2	404	.70	3	<5	<2	<2	144	26.2	<2	<2	3	25.04	.043	4	3	10.79	101 .01	5	.24	.01	.18	<2	<5	<1	.01	
LJH-50	3	28	33	1144	<.3	36	15	324	2.61	3	<5	<2	10	62	8.4	<2	5	25	4.46	.097	10	33	2.67	142 .07	<3	2.17	.07	.90	3	<5	<1	<.01	
LJH-51	10	14	21	188	<.3	7	6	1380	1.08	<2	<5	<2	7	86	.7	<2	12	6	6.59	.150	15	5	1.44	50 .05	8	1.23	.09	.14	112	<5	<1	.02	
LJH-52	2	33	20	1352	.3	38	17	169	2.94	3	<5	<2	10	44	9.3	<2	7	27	3.09	.033	10	38	2.24	54 .07	<3	1.81	.07	.56	3	<5	<1	.01	
RE LJH-52	2	31	16	1342	<.3	38	16	159	2.91	3	<5	<2	11	43	9.5	2	7	26	3.00	.032	10	39	2.22	54 .07	<3	1.80	.07	.55	3	<5	<1	.01	
RRE LJH-52	2	34	11	1927	<.3	39	17	185	3.07	<2	<5	<2	10	52	14.3	<2	7	27	3.92	.035	10	40	2.68	61 .07	<3	1.91	.07	.62	3	<5	<1	<.01	
LJH-53	6	12	70	17696	.3	4	7	505	1.47	5	<5	<2	2	168	129.7	<2	2	4	24.49	.029	5	9	10.79	71 .01	3	.28	.01	.17	<2	<5	<1	<.01	
LJH-54	1	38	12	996	<.3	41	19	244	3.88	10	<5	<2	8	43	6.4	<2	8	36	2.91	.059	9	51	2.44	97 .11	<3	2.18	.06	.97	2	<5	<1	<.01	
LJH-55	14	20	12	337	<.3	30	12	789	2.86	<2	<5	<2	5	122	1.9	<2	8	38	5.80	.039	12	50	1.02	62 .21	<3	2.48	.10	.86	24	<5	<1	<.01	
LJH-56	157	7	19	126	<.3	13	4	928	1.13	5	<5	<2	10	238	.4	<2	<2	19	8.93	.111	21	29	.40	35 .11	3	3.85	.21	.23	36	<5	<1	<.01	
LJH-57	2	13	12	95	<.3	8	5	512	1.56	2	<5	<2	14	128	.6	<2	<2	15	5.83	.142	21	25	.32	23 .11	3	.93	.07	.20	4	<5	<1	.01	
LJH-58	178	7	13	131	<.3	11	5	1670	1.36	<2	<5	<2	10	176	.3	<2	<2	14	8.95	.116	22	16	.29	14 .09	3	1.58	.08	.09	179	<5	<1	<.01	
LJH-59	11	417	12	138	.5	28	33	1690	9.69	<2	<5	<2	11	184	.3	<2	9	23	4.77	.094	19	<1	.48	42 .10	<3	2.94	.19	.22	793	<5	<1	.01	
LJH-60	3	27	19	93	<.3	27	17	365	5.01	4	<5	<2	8	25	<.2	2	<2	47	.47	.045	13	50	.95	103 .30	<3	2.78	.04	1.34	18	<5	<1	.02	
LJH-61	1	23	12	71	<.3	25	17	409	4.20	<2	<5	<2	9	22	<.2	<2	5	36	.21	.042	17	33	.82	84 .17	<3	1.98	.03	.83	4	<5	<1	.01	
LJH-62	3	20	12	64	<.3	24	15	431	3.20	<2	<5	<2	13	26	.4	<2	3	36	.69	.165	24	48	.74	64 .16	<3	1.73	.03	.73	3	<5	<1	<.01	
LJH-63	1	14	5	32	<.3	12	6	225	1.41	2	<5	<2	10	15	<.2	<2	2	14	.63	.091	20	27	.29	36 .06	<3	.74	.04	.25	9	<5	<1	.01	
LJH-64	1	23	17	68	<.3	18	13	698	3.20	2	<5	<2	25	40	<.2	<2	5	34	1.28	.259	46	47	.71	56 .16	3	1.72	.03	.54	11	<5	<1	.02	
RE LJH-64	1	25	13	72	<.3	19	14	727	3.32	<2	<5	<2	28	42	.5	<2	7	35	1.33	.266	49	48	.73	59 .17	<3	1.79	.03	.56	11	<5	<1	.01	
RRE LJH-64	1	22	15	70	<.3	20	15	685	3.38	3	<5	<2	28	43	.3	<2	4	35	1.41	.333	50	48	.73	56 .16	3	1.74	.03	.58	14	<5	<1	.01	
LJH-65	1	9	4	52	<.3	10	6	776	2.05	<2	<5	<2	29	37	<.2	<2	8	22	1.36	.210	56	33	.50	27 .13	17	1.23	.02	.29	172	<5	<1	.11	
LJH-66	1	24	7	50	<.3	26	14	363	3.44	<2	<5	<2	10	44	.2	<2	2	25	.79	.063	15	26	.83	71 .07	<3	1.71	.06	.56	5	<5	<1	<.01	
LJH-67	3	28	6	59	<.3	27	18	311	3.75	3	<5	<2	12	33	<.2	<2	3	66	.48	.057	16	58	.89	117 .23	<3	2.20	.06	.96	3	<5	<1	<.01	
LJH-68	63	98	22	104	.5	25	32	914	9.08	12	<5	<2	3	38	<.2	<2	<2	94	1.21	.126	9	44	1.16	131 .29	<3	3.31	.04	1.69	3	<5	<1	.01	
LJH-69	2	20	13	78	<.3	22	17	555	4.32	12	<5	<2	7	76	.3	<2	<2	15	1.23	.068	15	11	.89	72 .01	4	.77	.01	.34	3	<5	<1	<.01	
LJH-70	1	18	19	122	<.3	14	11	711	3.47	3	<5	<2	4	73	.3	<2	2	39	1.69	.071	11	19	.84	90 .04	<3	1.49	.03	.42	4	<5	<1	.03	
LJH-71	1	23	9	79	<.3	27	17	317	3.85	<2	<5	<2	8	51	.2	<2	4	63	.71	.058	12	47	1.01	116 .22	<3	2.82	.11	1.07	3	<5	<1	<.01	
LJH-72	2	18	9	78	<.3	25	14	380	3.11	26	<5	<2	4	48	.2	<2	3	12	.51	.110	14	19	.45	42 .01	6	1.05	.01	.25	5	<5	<1	<.01	
LJH-73	2	23	11	65	<.3	27	18	714	4.63	20	<5	<2	7	19	<.2	4	<2	28	.42	.108	21	26	.87	60 .05	<3	1.97	.01	.48	2	<5	<1	<.01	
LJH-74	107	4	12	12	<.3	4	2	218	1.01	3	22	<2	18	28	.2	2	<2	1	.20	.013	8	10	.21	13<.01	3	.44	.04	.08	5	<5	<1	<.01	
STANDARD C2/AU-1	20	55	45	128	6.7	73	36	1121	3.83	45	21	9	36	49	19.7	18	23	70	.52	.104	39	61	.95	183 .08	25	1.85	.06	.15	16	<5	<1	3.39	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: FEB 27 1997 DATE REPORT MAILED: *March 4/97* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS  
 All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data FA



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	gm/t
LJH-75	1	22	5	68	<.3	27	17	1264	4.76	17	<5	<2	6	29	.2	4	<2	30	.42	.095	18	28	.82	65	.08	7	1.35	.01	.60	<2	<5	1	.01
LJH-76	76	19	7	51	<.3	21	12	916	3.82	64	<5	<2	6	40	.4	6	2	14	.55	.130	17	11	.62	40	.01	5	.93	<.01	.31	2	<5	<1	.02
LJH-77	5	41	6	24	<.3	24	12	444	2.28	47	<5	<2	<2	24	<.2	7	7	3	.27	.035	8	17	.28	18	<.01	7	.21	<.01	.10	3	<5	1	.02
LJH-78	11	12	6	32	<.3	14	8	650	2.48	12	<5	<2	4	19	<.2	4	3	7	.32	.093	17	15	.41	34	.01	7	.46	<.01	.20	2	<5	<1	<.01
LJH-79	14	11	5	34	<.3	16	6	557	1.92	11	<5	<2	3	21	.2	2	3	5	.21	.039	15	17	.33	23	<.01	<3	.30	<.01	.17	2	<5	<1	.01
RE LJH-79	14	9	8	32	<.3	13	6	559	1.93	13	<5	<2	3	21	<.2	2	3	4	.21	.036	15	15	.33	34	<.01	<3	.30	<.01	.17	2	<5	<1	.01
RRE LJH-79	16	8	7	28	<.3	9	6	574	1.93	13	<5	<2	3	21	<.2	3	4	4	.22	.038	13	13	.34	22	<.01	3	.28	<.01	.15	2	<5	<1	<.01
LJH-80	2	7	7	43	<.3	7	5	829	3.19	4	<5	<2	20	40	<.2	<2	3	34	1.06	.178	39	42	.54	60	.15	<3	1.33	.01	.43	<2	<5	<1	.01
STANDARD C2/AU-1	20	57	41	126	6.5	72	35	1097	3.88	43	20	7	35	51	19.2	18	18	69	.51	.107	40	60	.94	185	.08	27	1.86	.06	.14	12	<5	1	3.50

Sample type: CORE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0884R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
LJH-43	.001	<.001	.98	4.71	<.01	.010	<.001	.01	36.21	.02	.01	<.01	.010	.004	<.01
LJH-44	.002	.003	1.33	3.49	.02	.018	<.001	<.01	39.65	.02	.01	<.01	.010	.004	<.01
LJH-45	.002	.001	1.50	5.75	.27	.007	.001	.05	19.93	.01	.02	<.01	.020	.004	<.01
LJH-46	<.001	.002	.03	.12	.03	.001	<.001	.07	.78	<.01	<.01	<.01	<.001	<.001	<.01
LJH-47	<.001	<.001	<.01	.11	.02	.005	<.001	.04	.50	<.01	.01	<.01	<.001	<.001	<.01
LJH-48	<.001	<.001	.05	.71	.10	<.001	.001	.03	3.77	<.01	.01	<.01	.010	.001	<.01
RE LJH-48	<.001	<.001	.05	.70	.04	.004	.001	.03	3.79	<.01	<.01	<.01	.010	.002	<.01
LJH-52	<.001	.002	<.01	.14	.07	.002	.001	.02	2.87	<.01	<.01	<.01	.001	<.001	<.01
LJH-53	<.001	<.001	.01	1.97	.03	.001	<.001	.05	1.64	<.01	<.01	<.01	.010	<.001	<.01
LJH-54	<.001	.002	<.01	.07	<.01	.002	.001	.02	3.65	<.01	.01	<.01	<.001	<.001	<.01
STANDARD R-1	.087	.841	1.30	2.27	2.85	.028	.026	.08	6.76	.94	.02	.01	.050	.180	.04

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 14 1997 DATE REPORT MAILED: *Mar 25/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0884R2

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#

W  
%

LJH-51	.02
LJH-58	.02
LJH-59	.09
LJH-65	.02
RE LJH-65	.02

W BY REGULAR ASSAY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 14 1997 DATE REPORT MAILED: *Mar 25/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





## GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0952

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm
LJH-81	6	9	368	131	.3	15	1	299	5.78	37	<5	<2	<2	71	1.6	2	<2	37	15.40	.017	<1	<1	8.68	55<.01	<3	.07<.01	.02	<2	<5	<1	<.01		
LJH-82	25	20	15158	776	11.4	110	8	39	16.75	159	<5	<2	<2	7	8.7	45	5	278	.53	.053	1	19	.18	2<.01	3	.09<.01	.05	6	<5	<1	.15		
LJH-83	46	34	4161	254	1.7	119	6	86	16.21	169	<5	<2	<2	5	2.2	14	3	320	.19	.012	<1	35	.05	5<.01	6	.07<.01	.01	7	<5	<1	.02		
LJH-84	45	79	1526	2489	1.2	77	11	391	10.52	141	<5	<2	<2	38	19.4	5	<2	50	7.35	.013	1	2	5.12	28<.01	<3	.05<.01	.03	2	<5	<1	.03		
LJH-85	6	14	378	214	.9	13	1	492	1.37	10	<5	<2	<2	114	1.4	2	7	27	16.66	.026	3	7	9.17	17<.01	<3	.04<.01	<.01	<2	<5	<1	.01		
LJH-86	17	6	806	305	1.0	22	1	404	3.51	28	5	<2	<2	137	2.2	4	<2	54	15.34	.045	<1	4	8.15	52<.01	<3	.05<.01	.02	<2	<5	<1	<.01		
LJH-87	17	19	569	444	.8	30	1	471	2.75	92	<5	<2	<2	138	3.1	9	<2	121	16.77	.047	5	15	8.32	60<.01	<3	.08<.01	.03	<2	<5	<1	.02		
LJH-88	9	6	233	498	.4	20	1	183	2.19	24	<5	<2	<2	119	2.8	4	<2	65	23.19	.042	2	7	4.90	66<.01	<3	.05<.01	.02	<2	<5	<1	.01		
LJH-89	10	13	647	858	2.3	13	2	487	6.06	195	<5	<2	<2	158	10.0	5	4	13	18.38	.007	1	<1	8.00	69<.01	<3	.03<.01	<.01	<2	<5	<1	.04		
LJH-90	13	7	6491	8393	3.6	29	5	207	13.78	60	<5	<2	<2	47	181.7	14	2	19	5.68	.005	<1	<1	5.09	11<.01	<3	.02<.01	<.01	<2	<5	<1	.06		
LJH-91	21	7	8259	15836	3.7	62	6	123	13.32	64	<5	<2	<2	12	204.4	14	<2	16	1.49	.005	<1	<1	1.90	2<.01	<3	.01<.01	.01	<2	<5	<1	.10		
LJH-92	31	11	8697	21877	2.3	90	8	88	12.86	58	<5	3	<2	11	242.4	17	<2	26	1.33	.004	<1	<1	1.52	2<.01	<3	.01<.01	<.01	2	<5	<1	.11		
RE LJH-92	34	13	8802	23270	2.7	97	8	92	14.36	84	5	<2	<2	13	240.6	20	<2	27	1.42	.004	<1	<1	1.53	5<.01	<3	.01<.01	<.01	<2	<5	<1	.11		
RRE LJH-92	35	14	8970	23083	2.6	106	9	104	16.22	89	<5	<2	<2	13	241.2	20	<2	32	1.44	.004	<1	<1	1.73	4<.01	<3	.01<.01	<.01	<2	<5	<1	.11		
LJH-93	16	28	7284	18108	13.1	60	4	412	17.42	78	<5	<2	<2	44	76.5	21	<2	14	4.86	.006	<1	<1	4.87	7<.01	<3	.01<.01	<.01	<2	<5	<1	.13		
LJH-94	5	32	3063	3297	7.0	25	3	448	8.17	32	6	<2	<2	69	17.3	10	<2	14	9.98	.005	<1	<1	6.92	7<.01	<3	.02<.01	.01	2	<5	<1	.06		
LJH-95	5	22	2955	5743	4.0	23	4	346	12.49	63	<5	<2	<2	48	25.9	7	<2	10	6.80	.005	<1	<1	6.07	6<.01	<3	.01<.01	<.01	<2	<5	<1	.05		
LJH-96	8	164	2885	2759	4.0	10	3	1339	5.16	16	<5	<2	<2	150	17.7	6	4	13	17.87	.007	2	<1	7.55	54 .01	5	.12 .01 .03	10	<5	<1	<.01			
LJH-97	2	31	53	104	<.3	35	16	450	3.37	13	<5	<2	10	39	.4	3	<2	20	.79	.065	15	26	.82	62 .06	4	1.22 .02 .49	5	<5	<1	<.01			
LJH-98	1	15	42	137	<.3	22	12	585	3.53	<2	<5	<2	12	19	.2	<2	<2	30	.56	.084	18	32	.91	79 .11	4	1.45 .03 .69	2	<5	<1	<.01			
STANDARD C3/AU-1	25	61	42	166	6.0	36	12	735	3.30	51	18	3	20	30	22.6	15	21	78	.65	.088	18	161	.64	137 .10	17	1.85 .04 .17	21	<5	2	3.28			

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS &gt; 1%, AG &gt; 30 PPM &amp; AU &gt; 1000 PPM

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 3 1997 DATE REPORT MAILED: March 10/97 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Assay in progress for Cu, Pb, Zn > 1%  
Ag > 30 ppm



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0952R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
LJH-82	.005	.002	3.02	.08	.28	.024	.001	<.01	38.00	.03	.01	<.01	.001	.010	<.01
LJH-83	.004	.003	.40	.01	<.01	.011	<.001	.01	15.91	.02	.02	<.01	<.001	.002	<.01
LJH-84	.005	.007	.16	.29	.08	.006	.001	.04	12.23	.01	<.01	<.01	.002	<.001	<.01
LJH-90	.002	<.001	.76	.97	.06	.003	<.001	.02	21.42	.01	.01	<.01	.020	.003	.01
LJH-91	.004	.001	1.20	1.91	.10	.011	<.001	.01	29.51	.01	<.01	<.01	.030	<.001	<.01
LJH-92	.005	<.001	1.28	2.72	.09	.019	.001	.01	31.04	.01	<.01	<.01	.040	.003	<.01
LJH-93	.002	.002	.95	2.12	.39	.007	<.001	.04	23.84	.01	.01	<.01	.010	.004	<.01
RE LJH-93	.002	.002	.95	2.10	.35	.006	.001	.04	23.74	.02	<.01	<.01	.010	.003	<.01
LJH-94	<.001	.005	.38	.41	.26	.003	<.001	.05	12.01	<.01	<.01	<.01	.002	.002	<.01
LJH-95	<.001	.003	.37	.68	.10	.002	<.001	.04	18.02	.01	.01	<.01	.003	<.001	<.01
STANDARD R-1	.087	.841	1.30	2.27	2.85	.028	.026	.08	6.76	.94	.02	.01	.050	.180	.04

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 14 1997 DATE REPORT MAILED: *Mar 25/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0953

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	gm/t	
JU 2788 0-4.1	114	11	48	26	4.1	6	4	779	1.62	32	<5	10	3	22	<2	22	1426	5	.53	.005	<1	<1	.76	10	<.01	6	.25	<.01	.19	635	<5	<1	6.86
*JU 2788 4.1-10	4	264	67	22	3.5	23	45	4473	14.20	609	<5	<2	<2	62	.2	5	19	16	3.57	.008	<1	<1	2.09	26	<.01	5	.28	.01	.19	200	<5	<1	.66
JU 2788 19-24	3	267	33	47	6.2	31	143	8093	24.35	376	5	7	<2	58	.7	22	1044	32	5.73	.011	<1	<1	5.01	59	<.01	<3	.77	.01	.64	7	<5	<1	7.85
JU 2788 30-35	3	213	169	595	8.4	19	57	9804	12.75	245	<5	<2	<2	107	7.3	13	15	17	13.56	.011	3	<1	7.44	12	<.01	<3	.06	<.01	.02	<2	<5	<1	.07
JU 2788 35-39.5	1	151	35	66	2.6	22	81	5068	16.92	324	<5	<2	<2	87	1.1	9	128	15	6.42	.007	<1	<1	5.89	35	<.01	<3	.82	.01	.78	3	<5	<1	.36
JU 2788 40.2-44	51	84	45	76	3.4	16	52	4903	10.51	41	<5	4	<2	71	<2	27	1276	22	2.93	.010	<1	<1	3.55	35	<.01	4	.94	.01	.82	135	<5	<1	4.82
JU 2788 44-51	14	109	789	45173	4.3	10	29	7634	5.95	33	<5	<2	<2	107	550.8	4	79	38	14.86	.013	4	4	7.51	57	<.01	3	.17	<.01	.14	<2	<5	<1	.51
JU 2789 0-3	14	171	1579	50238	17.6	7	34	9656	8.36	475	<5	<2	<2	142	586.8	23	87	19	14.50	.013	4	3	7.69	21	<.01	<3	.06	<.01	.03	<2	<5	<1	.09
JU 2789 10-14.9	<1	261	603	1132	7.7	8	101	8016	21.94	4269	<5	<2	<2	119	9.2	103	2	16	4.60	.019	<1	<1	3.91	11	<.01	<3	.04	<.01	.01	<2	<5	<1	.80
JU 2789 51-55	2	9	25	354	.4	11	5	1245	3.63	48	7	<2	7	38	4.6	5	8	5	.68	.027	8	15	1.00	26	<.01	12	.72	.01	.18	6	<5	<1	.03
JU 2789 66-75	1	21	18	85	<.3	21	10	1342	3.39	92	10	<2	9	53	1.2	3	<2	14	1.02	.046	12	21	.92	52	.02	10	1.05	.01	.48	4	<5	<1	.01
JU 2790 0-7	2	97	72	754	1.8	8	41	9271	8.98	579	<5	<2	2	130	6.7	14	<2	12	14.92	.010	4	<1	7.67	13	<.01	<3	.05	<.01	.02	<2	<5	<1	.09
JU 2790 19.8-26.3	16	109	8120	45224	86.7	25	14	2883	7.36	1034	<5	<2	<2	131	345.3	150	176	25	13.72	.012	4	<1	7.81	11	<.01	<3	.05	<.01	.02	<2	<5	<1	.12
RE JU 2790 19.8-26.3	16	103	8004	43123	83.5	24	13	2724	7.00	986	<5	<2	<2	123	333.0	149	162	24	12.89	.011	4	3	7.49	11	<.01	<3	.05	<.01	.02	<2	<5	<1	.12
RRE JU 2790 19.8-26.3	13	83	7233	36547	68.9	22	10	2109	5.52	600	<5	<2	<2	101	271.3	127	130	19	10.31	.011	4	<1	6.33	9	<.01	<3	.04	<.01	.02	<2	<5	<1	.23
JU 2791 29.3-39	<1	122	218	229	3.9	5	63	9686	19.61	1007	<5	<2	2	85	2.3	59	<2	21	3.87	.008	<1	<1	3.15	8	<.01	<3	.01	<.01	<.01	2	<5	<1	.69
JU 2791 39-44.3	2	364	83	5581	2.6	3	73	5330	21.88	634	<5	<2	<2	49	44.6	39	<2	8	2.65	.014	<1	<1	1.35	5	<.01	<3	.02	<.01	<.01	<2	<5	<1	.25
JU 2792 0-4	7	48	310	15709	4.3	6	19	6651	5.72	384	<5	<2	<2	139	158.6	15	5	21	18.23	.010	3	<1	9.16	48	<.01	<3	.08	<.01	.04	<2	5	<1	.05
JU 2792 4-6	2	7	188	323	3.4	2	2	1753	.89	46	<5	<2	<2	188	2.5	3	6	11	21.40	.009	2	2	10.34	22	<.01	4	.06	<.01	.03	4	<5	<1	<.01
JU 2792 6-10	4	212	1814	6189	9.3	9	72	6391	18.36	995	<5	<2	<2	81	51.7	36	4	15	7.19	.021	3	<1	4.26	54	.01	<3	.32	<.01	.18	<2	<5	<1	.08
JU 2792 10-16.5	4	20	148	8040	.8	7	3	2162	2.03	58	<5	<2	<2	377	56.6	<2	<2	28	21.53	.012	6	4	9.05	122	.01	6	.25	<.01	.15	<2	<5	<1	<.01
JU 3268 43.5-48	<1	306	44	56	1.5	2	100	10900	20.22	1448	<5	<2	<2	97	.7	18	<2	13	7.25	.028	1	<1	3.36	11	<.01	<3	.03	<.01	<.01	3	<5	<1	.12
JU 3268 58-65.5	<1	417	36	90	2.3	3	171	8892	24.98	115	<5	<2	<2	42	1.3	<2	<2	7	5.31	.031	<1	<1	2.36	8	<.01	<3	.03	<.01	<.01	2	<5	<1	.01
JU 3268 70-72.5	<1	803	9	19	2.3	8	186	3493	27.06	29	<5	3	<2	26	<.2	<2	72	23	3.68	.022	<1	<1	1.06	12	<.01	<3	.09	<.01	<.01	<2	<5	<1	5.27
DU 523 293-302.6	<1	759	44	20	3.4	5	110	2918	35.17	227	<5	<2	<2	24	<.2	<2	<2	1	1.40	.011	<1	<1	.22	6	<.01	<3	.04	.01	<.01	2	<5	<1	.04
DU 523 343.9-351	11	555	16	67	5.5	10	65	4405	15.98	20	10	5	<2	21	<.2	<2	741	33	2.56	.136	2	<1	1.12	22	.01	<3	.46	.02	.25	1259	<5	<1	3.35
STANDARD CS/AU-1	25	60	39	153	6.1	34	11	737	3.27	53	25	4	19	29	23.7	16	22	77	.56	.087	18	155	.61	137	.10	18	1.80	.04	.16	21	<5	<1	3.22

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 3 1997 DATE REPORT MAILED: *March 13/97* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

\* Collected sample name.

*Revised Copy*



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-0953R2

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#

W  
%

JU 2788 0-4.1	.11
JU 2788 4.1-10	.02
DU 523 343.9-351	.22
RE DU 523 343.9-351	.23

W BY REGULAR ASSAY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'BRE' are Reject Reruns.

DATE RECEIVED: MAR 14 1997 DATE REPORT MAILED: *Mar 25/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY

File # 97-1057

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

Submitted by: Jack Denny

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	W
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	gm/t	%	
LJH-99	2	10	34	125	<.3	15	6	2118	3.54	15	<.5	<.2	10	101	.6	2	<.2	9	2.06	.061	14	14	.97	60	.01	5	1.42	.02	.32	<.2	<.5	<.1	<.01	-
LJH-100	1	26	7	60	<.3	11	9	769	4.15	11	<.5	<.2	15	22	<.2	<.2	44	.51	.122	30	44	.56	107	.23	<.3	1.38	.04	.85	3	<.5	1	.01	-	
LJH-101	9	37	8	36	<.3	26	12	421	3.08	61	<.5	<.2	19	22	<.2	<.2	28	.37	.051	29	52	.83	121	.09	<.3	1.46	.05	.78	3	<.5	<.1	<.01	-	
LJH-102	1	34	7	48	<.3	17	16	515	4.32	32	<.5	<.2	3	35	<.2	<.2	36	.72	.076	8	37	.86	115	.12	<.3	1.94	.02	.91	4	<.5	<.1	<.01	-	
LJH-103	2	6	7	26	<.3	8	3	442	1.29	2	<.5	<.2	19	23	<.2	<.2	14	.60	.220	37	37	.35	37	.05	3	.73	.01	.22	3	<.5	<.1	<.01	-	
LJH-104	<.1	14	5	52	<.3	25	13	686	3.29	<.2	<.5	<.2	8	24	<.2	<.2	33	.41	.070	19	47	.94	96	.09	<.3	1.84	.05	.81	2	<.5	<.1	<.01	-	
LJH-105	<.1	21	7	61	<.3	31	17	509	3.96	<.2	<.5	<.2	13	16	<.2	<.2	41	.25	.062	26	50	.97	99	.11	<.3	1.99	.02	.89	<.2	<.5	<.1	<.01	-	
LJH-106	50	26	<.3	42	<.3	19	14	1364	3.47	62	<.5	<.2	20	82	<.2	<.2	14	1.55	.435	53	45	.67	45	.05	8	.88	.01	.30	4	<.5	1	<.01	-	
LJH-107	6	142	15	52	<.3	42	37	474	6.31	38	<.5	<.2	6	39	<.2	<.2	40	.93	.072	14	41	.74	56	.07	3	2.25	.11	.68	<.2	<.5	<.1	<.01	.04	
LJH-108	3	22	3	43	<.3	27	16	863	3.98	5	<.5	<.2	8	37	<.2	<.2	37	.70	.051	17	41	.80	65	.05	3	1.79	.03	.59	2	<.5	<.1	<.01	.01	
LJH-109	4	39	5	39	<.3	35	18	351	3.83	<.2	<.5	<.2	6	78	<.2	<.2	50	1.21	.069	13	48	.85	88	.11	<.3	3.34	.22	.63	<.2	<.5	<.1	<.01	-	
LJH-110	21	23	10	242	<.3	28	14	2544	4.04	67	<.5	<.2	7	59	1.4	<.2	16	1.03	.110	12	18	.69	56	.03	7	.72	.02	.39	3	<.5	<.1	<.01	-	
RE LJH-110	21	23	12	232	<.3	28	14	2547	4.08	68	<.5	<.2	7	59	1.3	<.2	15	1.03	.110	12	19	.69	57	.03	7	.72	.02	.39	3	<.5	<.1	<.01	-	
RRE LJH-110	17	26	7	219	<.3	30	15	2772	4.52	74	<.5	<.2	7	65	1.3	<.2	2	1.12	.112	12	16	.74	61	.03	7	.76	.03	.44	2	<.5	1	<.01	-	
LJH-111	1	22	18	79	<.3	33	19	954	4.91	<.2	<.5	<.2	7	30	<.2	<.2	73	.58	.074	17	53	1.04	90	.27	<.3	2.68	.08	1.09	2	<.5	1	<.01	-	
LJH-112	191	6	20	13	<.3	5	1	178	.55	105	<.5	<.2	8	22	<.2	<.2	1	.10	.014	8	11	.07	24	<.01	6	.31	.02	.20	3	<.5	<.1	<.01	-	
LJH-113	6	6	16	50	<.3	3	4	1075	1.63	60	6	<.2	22	97	<.2	<.2	1	.82	.057	23	10	.28	18	<.01	7	.42	.03	.18	4	<.5	<.1	<.01	-	
LJH-114	22	6	14	10	<.3	3	1	457	.58	103	9	<.2	24	66	<.2	<.2	<.1	.51	.016	12	13	.05	16	<.01	6	.22	.03	.20	3	<.5	<.1	<.01	-	
LJH-115	9	2	18	24	<.3	2	1	605	.62	82	9	<.2	19	63	<.2	<.2	<.1	.53	.017	12	13	.06	17	<.01	9	.21	.01	.21	4	<.5	<.1	<.01	-	
LJH-116	1167	5	16	15	<.3	4	1	524	.70	7	20	<.2	23	30	<.2	<.2	3	.32	.020	14	15	.08	19	.01	4	.35	.06	.18	4	<.5	<.1	<.01	-	
LJH-117	38	5	19	18	1.7	3	1	530	.63	419	11	<.2	20	36	<.2	<.2	3	.39	.018	15	15	.08	17	<.01	5	.33	.03	.15	6	<.5	<.1	<.01	-	
STANDARD C3/AU-1	24	64	35	142	6.0	37	13	878	3.27	57	19	<.2	18	31	23.2	14	21	83	.60	.098	19	165	.64	137	.10	16	1.89	.04	.17	18	<.5	1	3.30	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 W BY FUSION, ANALYSIS BY ASSAY ICP.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 10 1997 DATE REPORT MAILED: *Mar 19/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1156

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	gm/t
LJH-118	<1	<1	16	347	<.3	3	<1	62	1.02	5	<5	<2	<2	268	3.8	<2	3	7	41.70	.006	1	1	.64	12<.01	<3	.02	.02	.02	<2	<5	<1	<.01	
LJH-119	<1	<1	22	95	<.3	2	<1	30	.17	3	<5	<2	<2	250	.9	<2	<2	3	45.09	.002	<1	1	.44	18<.01	<3	.01	.01	.01	<2	<5	<1	<.01	
LJH-120	4	26	366	4505	1.2	13	2	323	3.87	8	<5	<2	<2	259	13.3	<2	<2	187	34.88	.090	3	<1	1.09	49<.01	<3	.05	.01	.06	<2	<5	1	<.01	
LJH-121	5	98	6681	14297	7.9	68	4	458	17.87	21	15	<2	9	91	95.5	5	16	28	7.90	.023	6	4	3.74	89<.06	<3	.95	.02	.25	<2	<5	<1	.01	
LJH-122	4	2	387	1058	.5	14	<1	130	3.16	25	<5	<2	<2	217	6.9	<2	<2	48	32.62	.012	1	<1	2.05	39<.01	<3	.05	.01	.04	<2	<5	1	<.01	
LJH-123	12	9	274	1441	.5	27	<1	96	8.63	57	<5	<2	<2	129	10.8	<2	<2	64	23.61	.010	1	<1	1.67	27<.01	<3	.04	.01	.03	<2	<5	<1	<.01	
LJH-124	<1	11	8	31	<.3	24	13	157	2.09	49	<5	<2	11	59	.3	2	<2	21	2.09	.034	14	31	1.03	32<.11	<3	.59	.01	.15	<2	<5	<1	.01	
LJH-125	5	5	5	1183	<.3	3	1	970	1.16	3	<5	<2	<2	289	9.0	<2	<2	6	22.54	.046	6	5	9.85	23<.02	13	.41	.01	.15	17	<5	<1	<.01	
LJH-126	11	2	16	14	<.3	1	<1	917	.28	<2	24	<2	13	8	<.2	<2	4	<1	.21	.003	5	12	.06	10<.01	<3	.15	.04	.09	3	<5	<1	<.01	
LJH-127	7	17	6	56	<.3	20	13	583	3.03	3	<5	<2	7	34	.2	<2	2	15	1.01	.093	14	23	.87	68<.02	7	1.26	.02	.43	<2	<5	<1	<.01	
LJH-128	5	57	4	46	<.3	6	10	629	3.18	15	<5	<2	6	49	<.2	2	<2	7	1.52	.169	23	18	.37	30<.01	<3	.58	.01	.12	3	<5	<1	<.01	
LJH-129	5	116	<3	62	.3	6	15	904	5.85	<2	5	<2	10	64	<.2	<2	<2	15	2.19	.160	32	14	.54	28<.01	<3	.83	.01	.11	3	<5	<1	<.01	
RE LJH-129	5	111	15	61	.3	7	14	881	5.67	<2	<5	<2	10	62	.2	<2	2	14	2.15	.165	31	13	.53	22<.01	4	.80	.01	.10	3	<5	<1	<.01	
RRE LJH-129	5	105	<3	63	.5	7	16	1009	6.67	<2	<5	<2	10	70	<.2	<2	<2	15	2.46	.162	31	15	.55	22<.01	<3	.84	.01	.10	2	<5	<1	<.01	
LJH-130	5	159	6	99	.3	19	52	478	6.34	24	5	<2	18	39	.2	<2	4	3	1.09	.236	14	6	.36	44<.01	6	.69	.01	.24	3	<5	<1	<.01	
LJH-131	163	7	82	153	2.7	14	5	786	1.78	187	7	<2	22	73	1.1	10	261	5	.68	.016	11	18	.49	33<.01	4	.55	.01	.22	3	<5	<1	.37	
LJH-132	4	9	11	13	<.3	2	2	388	.98	23	<5	<2	15	29	<.2	<2	<2	2	.59	.052	12	8	.19	18<.01	6	.40	.02	.13	4	<5	<1	<.01	
LJH-133	77	5	39	68	.7	4	1	653	.86	99	13	<2	19	63	.6	7	6	1	.80	.031	13	11	.15	18<.01	8	.20	.02	.15	3	<5	<1	.02	
JU 2812 71-76	<1	586	3	4	1.7	3	152	2080	33.97	277	<5	<2	3	33	<.2	<2	4	1	3.61	.004	1	<1	.24	7<.01	9	.01	<.01	.01	<2	<5	2	.01	
JU 2843 0-6.5	<1	277	68	22	2.1	<1	36	8165	21.07	1097	<5	<2	2	34	<.2	12	11	8	2.13	.011	<1	<1	1.59	4<.01	<3	.01	.01	.01	2	<5	<1	2.11	
JU 2843 6.5-10.5	<1	429	29	89	.8	<1	82	5628	27.55	402	<5	<2	3	37	<.2	<2	9	7	2.32	.012	1	<1	.90	10<.01	<3	.01	.01	.01	<2	<5	<1	.33	
JU 2843 10.5-18.5	<1	224	64	57	1.2	<1	40	9447	22.38	775	<5	<2	3	56	<.2	<2	13	9	3.28	.011	1	<1	2.20	7<.01	3	.02	.01	.02	2	<5	1	.62	
JU 2843 18.5-20.5	<1	414	21	8	.6	10	128	3336	34.78	54	<5	<2	4	21	<.2	<2	<2	12	1.15	.007	1	2	.58	34<.01	<3	.28	.01	.10	2	<5	<1	.02	
JU 2844 0-7	<1	14	106	9	2.4	<1	33	6170	17.41	7047	8	<2	2	27	<.2	8	<2	7	2.39	.019	<1	<1	1.82	10<.01	<3	.01	.01	.01	<2	<5	<1	6.60	
JU 2844 18.3-23.3	1	78	10232	12527	19.2	<1	1	3681	9.01	209	5	<2	2	132	112.0	25	7	22	16.54	.024	3	<1	4.44	35<.01	<3	.05	<.01	.04	2	<5	<1	.10	
JU 3258 82.9-86	<1	430	49	60	1.2	<1	153	10430	18.79	190	<5	<2	4	41	.7	<2	13	13	6.50	.031	1	<1	3.59	25<.01	5	.33	.01	.15	<2	<5	<1	.04	
RE JU 3258 82.9-86	<1	432	44	58	1.2	<1	155	10480	19.89	182	<5	<2	4	42	.8	<2	17	13	6.58	.033	1	<1	3.59	29<.01	4	.33	.01	.15	<2	<5	<1	.04	
RRE JU 3258 82.9-86	<1	486	50	54	1.1	1	165	10774	19.36	157	<5	<2	4	44	.6	<2	8	13	6.99	.031	1	<1	3.80	32<.01	<3	.38	<.01	.16	<2	<5	<1	.03	
JU 3479 14.1-21	1	30	10	48	.3	33	15	268	3.48	5	<5	<2	9	39	.2	<2	<2	29	1.59	.052	15	44	1.00	73<.08	<3	2.52	.04	.40	2	<5	1	<.01	
JU 3479 21-29	1	35	15	60	<.3	40	18	456	3.85	4	<5	<2	10	57	.4	<2	<2	34	3.27	.066	18	52	.89	44<.12	<3	2.09	.03	.30	45	<5	<1	<.01	
JU 3479 83.8-87.8	<1	174	226	41	3.1	<1	131	10328	17.96	4837	<5	<2	2	87	<.2	69	6	14	6.04	.083	1	<1	3.31	8<.01	<3	.05	.01	.02	<2	<5	1	1.57	
JU 3479 94.3-104.0	1	149	69	138	4.5	<1	81	10815	14.84	1487	<5	<2	2	89	.8	84	6	7	7.04	.020	1	<1	3.24	5<.01	<3	.02	<.01	.01	<2	<5	<1	.19	
STANDARD C3/AU-1	26	65	34	166	6.0	34	12	803	3.51	57	26	2	18	32	25.5	19	25	82	.61	.099	19	171	.68	163<.10	21	1.94	.04	.19	19	<5	1	3.36	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS &gt; 1%, AG &gt; 30 PPM &amp; AU &gt; 1000 PPB

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 13 1997 DATE REPORT MAILED: *Mar 20/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA *[Signature]*



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1156R

P.O. Box 10435, 1610 - 77, Vancouver, BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
LJH-121	.001	.011	.64	1.47	.22	.008	<.001	.04	22.99	<.01	<.01	<.01	.010	<.001	<.01
JU 2844 18.3-23.3	<.001	.010	1.23	1.42	.60	<.001	<.001	.38	10.83	.02	<.01	<.01	.012	.002	<.01
RE JU 2844 18.3-23.3	<.001	.010	1.23	1.44	.60	<.001	<.001	.38	10.93	.02	<.01	<.01	.013	.002	<.01

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 9 1997 DATE REPORT MAILED: April 16/97 SIGNED BY: *C. Hoy* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1191

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
LJH-134	2	10	4446	50547	1.4	5	3	415	.91	5	<5	<2	2	204	403.4	8	<2	<1	22.72	.007	7	1	6.41	181<.01	3	.20	.01	.12	<2	<5	<1	.01	
LJH-135	2	20	1543	32605	2.4	5	2	475	1.23	11	<5	<2	2	220	269.7	6	3	9	21.03	.007	7	2	8.05	37<.01	3	.29	.01	.03	<2	<5	1	.02	
LJH-136	1	12	246	29130	.6	13	5	371	1.20	10	<5	<2	3	182	227.5	8	<2	4	19.99	.012	10	5	6.56	217<.01	3	.44	<.01	.18	<2	<5	<1	<.01	
LJH-137	<1	<1	37	290	.3	1	<1	109	.27	3	<5	<2	<2	167	3.4	<2	<2	3	37.95	.002	1	<1	1.16	42<.01	<3	.01	<.01	.01	<2	<5	<1	<.01	
LJH-138	1	<1	32	213	.3	2	<1	91	.79	24	<5	<2	<2	147	1.9	2	<2	12	36.98	.008	1	1	1.23	54<.01	3	.02	<.01	.01	<2	<5	<1	<.01	
LJH-139	7	106	9	177	<.3	20	3	235	2.22	<2	<5	<2	<2	84	.8	<2	<2	13	12.82	.007	1	<1	1.26	28<.01	5	.03	<.01	.02	4	<5	<1	<.01	
LJH-140	7	129	164	191	1.6	28	1	206	7.17	<2	<5	<2	<2	151	2.4	<2	<2	10	26.87	.003	1	<1	.74	56<.01	4	.03	<.01	.02	<2	<5	<1	<.01	
LJH-141	6	42	6	292	<.3	34	4	224	1.02	9	5	<2	<2	16	.6	<2	2	41	2.03	.031	2	5	.45	102<.01	3	.05	<.01	.01	<2	<5	1	<.01	
LJH-142	8	120	17	154	<.3	47	3	364	1.75	29	<5	<2	<2	48	.5	<2	<2	32	5.95	.131	4	1	1.76	53<.01	6	.04	.01	.03	2	<5	<1	<.01	
LJH-143	5	115	13	42	<.3	21	1	434	2.55	3	<5	<2	<2	104	.3	<2	<2	28	15.41	.007	4	<1	7.34	28<.01	64	.02	<.01	.01	2	<5	<1	<.01	
LJH-144	3	213	135	87	.8	37	3	638	5.48	<2	<5	<2	<2	81	1.0	<2	2	33	14.56	.006	3	<1	5.72	27<.01	27	.02	<.01	.02	2	<5	<1	<.01	
LJH-145	7	71	10	114	<.3	50	4	496	1.96	5	<5	<2	<2	37	.3	<2	<2	53	5.84	.027	2	4	2.47	19<.01	13	.03	<.01	.02	4	<5	<1	<.01	
LJH-146	12	19	6	471	<.3	83	3	524	1.23	10	<5	<2	<2	20	1.1	<2	2	172	3.52	.030	2	54	1.45	13<.01	7	.06	.01	.01	<2	<5	<1	<.01	
RE LJH-146	11	18	6	450	<.3	82	3	528	1.23	9	<5	<2	<2	19	1.0	<2	2	170	3.50	.029	2	53	1.45	13<.01	7	.06	.01	.01	<2	<5	<1	<.01	
RRE LJH-146	9	22	7	858	<.3	96	4	547	1.32	14	<5	<2	<2	20	1.8	<2	<2	164	3.66	.029	2	48	1.47	13<.01	7	.06	.01	.01	<2	<5	1	<.01	
LJH-147	85	75	9	75	<.3	147	4	410	1.93	3	<5	<2	<2	55	.3	<2	<2	139	9.38	.083	4	16	4.60	29<.01	19	.05	<.01	.03	4	<5	<1	<.01	
LJH-148	18	46	29	245	<.3	38	2	429	1.34	3	<5	<2	<2	86	2.3	<2	2	77	13.37	.055	5	16	6.22	55<.01	26	.05	<.01	.04	<2	<5	<1	<.01	
LJH-149	3	40	4608	5184	5.7	12	1	501	1.68	2	<5	<2	<2	82	43.6	9	11	35	16.96	.019	3	1	7.74	26<.01	31	.03	<.01	.02	<2	<5	<1	<.01	
LJH-150	2	84	67	160	.4	30	3	384	2.45	3	<5	<2	<2	90	1.8	<2	2	36	16.33	.014	3	1	6.52	28<.01	25	.03	<.01	.03	<2	<5	<1	.02	
LJH-151	6	217	1360	1043	3.6	52	5	575	7.35	<2	<5	<2	<2	79	16.1	<2	12	24	14.31	.005	3	<1	6.76	21<.01	33	.02	<.01	.01	7	<5	<1	<.01	
LJH-152	1	15	213	254	.6	10	1	299	1.46	7	<5	<2	<2	184	2.0	<2	<2	44	24.71	.012	3	8	7.51	52<.01	3	.03	<.01	.03	<2	<5	<1	<.01	
STANDARD C3/AU-1	23	61	32	149	5.4	33	12	799	3.22	54	17	<2	18	28	22.3	17	15	80	.54	.092	16	156	.60	137	.07	19	1.71	.04	.18	17	<5	<1	3.18

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 17 1997 DATE REPORT MAILED: *Mar 25/97* SIGNED BY *J.W.* ...D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS





## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1191R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
LJH-134	<.001	<.001	.53	5.53	<.01	<.001	<.001	.04	.93	<.01	<.01	<.01	.041	.001	<.01
LJH-135	<.001	.001	.17	3.46	.05	<.001	<.001	.04	1.30	<.01	<.01	<.01	.027	.001	<.01
LJH-136	<.001	<.001	.03	3.11	<.01	.001	<.001	.04	1.32	<.01	<.01	<.01	.024	.001	<.01
RE LJH-136	<.001	<.001	.03	3.11	<.01	.001	<.001	.04	1.33	<.01	<.01	<.01	.024	.001	<.01

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 9 1997 DATE REPORT MAILED: April 16/97 SIGNED BY: *Cheng* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL ANALYSIS CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1192

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#

Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
LJH-153	8 263	152	399	1.2	43	4 182	15.05	5	<5	<2	<2	83	3.3	<2	2	21	12.32	.007	<1	<1	4.35	57	<.01	<3	.03	.01	<.01	<2	<5	<1	<.01	
LJH-154	8 218	9	139	.3	18	3 299	5.32	<2	<5	<2	<2	69	1.4	<2	2	16	12.25	.011	3	<1	1.71	66	<.01	5	.02	<.01	<.01	14	<5	<1	<.01	
LJH-155	2 52	23	226	<.3	17	2 501	1.59	2	<5	<2	<2	99	1.6	<2	27	29	17.03	.037	5	1	1.20	29	<.01	6	.02	<.01	<.01	6	<5	<1	<.01	
LJH-156	3 6	458	541	.5	21	2 308	1.55	12	<5	<2	<2	130	3.8	11	<2	49	22.17	.011	1	5	9.52	28	<.01	<3	.04	<.01	<.01	<2	<5	<1	<.01	
LJH-157	16 15	386	438	1.0	54	3 232	5.56	16	<5	<2	2	86	4.8	5	<2	56	18.11	.006	1	3	6.15	76	<.01	<3	.06	<.01	.03	2	<5	<1	<.01	
LJH-158	2 5	119	177	.3	5	1 258	1.76	5	<5	<2	<2	102	2.3	2	<2	9	21.79	.005	1	1	8.66	38	<.01	<3	.04	<.01	<.01	2	<5	<1	<.01	
LJH-159	15 48	6301	4269	3.0	73	8 486	17.58	99	<5	<2	<2	68	58.7	27	<2	302	6.20	.005	<1	<1	4.53	4	<.01	<3	.10	<.01	<.01	<2	<5	<1	<.01	
LJH-160	1 71	73	55	.4	26	16 439	3.75	9	<5	<2	7	19	<.2	<2	<2	9	.79	.056	10	9	.88	73	.01	<3	1.11	.01	.41	2	<5	<1	<.01	
RE LJH-160	<1 67	69	52	.3	25	15 417	3.58	11	<5	<2	7	18	<.2	<2	2	9	.75	.053	9	7	.84	69	.01	<3	1.05	.01	.40	<2	<5	<1	<.01	
RRE LJH-160	1 78	62	50	.3	26	16 428	3.77	6	<5	<2	8	18	<.2	<2	2	10	.65	.057	10	9	.85	73	.02	<3	1.13	.01	.42	<2	<5	<1	<.01	
LJH-161	2 79	19	46	<.3	29	20 281	3.83	<2	<5	<2	8	34	<.2	<2	3	21	.47	.056	10	24	.86	69	.04	<3	1.62	.01	.58	<2	<5	<1	<.01	
LJH-162	104 237	168	20	.3	16	40 334	5.87	60	<5	<2	12	17	<.2	<2	5	20	.23	.095	12	19	.51	24	.02	<3	.96	<.01	.20	3	<5	<1	<.01	
STANDARD G3/AU-1	24 61	37	152	5.2	35	12 726	3.28	50	19	3	17	30	22.3	15	24	77	.67	.088	17	155	.65	146	.10	17	1.81	.04	.17	24	<5	<1	3.24	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 17 1997 DATE REPORT MAILED: *Mar 25/97* SIGNED BY *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1274 Page 1

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au** gm/t
AU-1	6	26	2139	19350	4.2	5	13	4320	2.85	110	9	<2	<2	233	198.1	706	21	32	19.20	.077	2	2	8.86	20<.01	3	.04	<.01	<.01	<2	<5	<1	.03	
AU-2	2	8	236	1010	.8	3	3	5201	1.28	50	10	<2	2	199	10.5	40	<2	17	21.91	.062	2	3	9.60	17<.01	5	.03	<.01	<.01	<2	<5	<1	.11	
AU-3	3	53	2280	7646	6.3	11	12	3719	2.90	198	11	<2	<2	178	52.6	98	14	30	20.32	.040	4	<1	9.40	13<.01	<3	.04	<.01	<.01	<2	<5	<1	.04	
AU-4	4	49	613	1404	2.3	13	8	3997	2.42	164	<5	<2	<2	247	9.8	88	8	45	21.64	.032	3	2	9.33	20<.01	3	.03	<.01	<.01	<2	<5	<1	.01	
AU-5	3	405	105	137	3.5	5	78	12720	19.20	2496	<5	<2	<2	64	.7	44	338	25	6.58	.025	<1	<1	3.80	22<.01	<3	.11	<.01	<.01	<2	<5	<1	.15	
AU-6	<1	7	18	100	.4	<1	2	1388	.85	21	<5	<2	2	198	.3	7	3	7	44.70	.009	2	<1	.40	33<.01	<3	.02	<.01	<.01	2	<5	<1	.02	
AU-7	<1	1145	14	24	1.9	2	90	2513	25.36	383	10	<2	<2	60	<.2	6	<2	5	13.08	.004	<1	<1	.18	18<.01	<3	.01	<.01	<.01	<2	<5	<1	.03	
AU-8	<1	1025	<3	4	<.3	2	195	1062	42.54	19	<5	<2	<2	9	.3	<2	<2	4	.61	<.001	1	<1	<.01	7<.01	<3	.01	<.01	<.01	<2	<5	<1	.03	
AU-9	1	1074	<3	3	.7	4	180	981	40.32	13	<5	<2	<2	15	<.2	5	6	5	.67	<.001	1	<1	.05	5<.01	<3	.03	<.01	<.01	34	<5	<1	.06	
AU-10	<1	30	11	22	<.3	1	8	4276	1.69	6	<5	<2	<2	191	.3	2	<2	7	39.71	.019	1	<1	.92	22<.01	<3	.02	<.01	.01	2	<5	<1	.02	
AU-11	<1	156	15	15	.4	<1	35	6844	5.51	25	<5	<2	3	146	.9	<2	5	8	29.19	.040	1	<1	1.12	22<.01	<3	.04	<.01	.02	2	<5	<1	.14	
AU-12	<1	21	14	36	<.3	1	14	2309	1.33	6	<5	<2	2	172	.6	<2	<2	9	35.83	.018	1	2	1.50	25<.01	<3	.02	<.01	.01	<2	<5	<1	<.01	
RE AU-12	<1	21	15	35	<.3	<1	12	2283	1.33	5	<5	<2	<2	171	.4	<2	<2	9	35.68	.018	1	2	1.49	24<.01	<3	.02	<.01	.01	2	<5	<1	<.01	
RRE AU-12	<1	19	13	37	.3	<1	11	2331	1.42	4	<5	<2	<2	166	.6	<2	<2	8	34.46	.017	<1	1	1.41	24<.01	<3	.02	<.01	<.01	2	<5	<1	<.01	
AU-13	1	3	16	18	<.3	<1	2	1971	.35	55	<5	<2	<2	199	.2	<2	<2	4	42.70	.008	2	1	.83	22<.01	<3	.01	.01	<.01	<2	<5	1	.03	
AU-14	<1	417	47	3	.9	1	83	5505	28.89	406	<5	<2	<2	28	<.2	<2	<2	6	2.51	.011	<1	<1	1.42	6<.01	<3	.01	.01	<.01	<2	<5	<1	.23	
AU-15	<1	262	37	8	.4	<1	97	12265	17.28	549	5	<2	<2	62	<.2	<2	<2	11	7.68	.034	<1	<1	4.20	7<.01	<3	.02	<.01	<.01	<2	<5	<1	.05	
AU-16	<1	388	34	4	.8	1	98	9940	25.06	411	<5	<2	<2	36	<.2	<2	<2	8	5.02	.022	<1	<1	3.67	9<.01	<3	.02	<.01	<.01	2	<5	<1	.02	
AU-17	<1	596	36	2	.8	2	182	3760	30.78	131	<5	<2	<2	24	<.2	<2	<2	6	2.39	.006	<1	6	1.05	6<.01	<3	.01	<.01	<.01	2	<5	<1	.03	
AU-18	<1	405	92	3	.9	1	135	8744	26.97	1256	<5	<2	<2	42	<.2	<2	<2	12	3.65	.015	<1	<1	1.95	7<.01	<3	.02	<.01	<.01	<2	<5	<1	.08	
AU-19	<1	154	212	25	1.3	3	76	14755	21.21	2423	<5	<2	<2	61	<.2	63	<2	21	3.86	.018	<1	<1	3.80	7<.01	<3	.03	<.01	<.01	2	8	<1	.96	
AU-20	2	63	153	138	.9	3	60	14626	15.36	2796	<5	<2	<2	72	.4	33	<2	36	7.28	.022	<1	<1	5.10	10<.01	<3	.01	<.01	<.01	<2	<5	<1	.60	
AU-21	<1	1	20	32	<.3	1	3	4329	1.72	449	<5	<2	<2	334	.3	3	<2	16	37.67	.013	2	<1	2.86	24<.01	3	.01	<.01	<.01	<2	<5	<1	.08	
AU-22	5	31	6237	11606	16.2	8	7	2029	1.69	60	<5	<2	<2	263	80.9	21	11	24	24.87	.052	5	4	9.66	47<.01	5	.07	<.01	.03	<2	<5	<1	.02	
AU-23	6	107	15494	58471	52.2	22	14	2134	6.13	91	5	<2	<2	110	429.7	23	74	33	14.19	.011	1	2	8.17	54<.01	<3	.11	<.01	.07	<2	<5	<1	.06	
AU-24	2	14	1409	5303	3.7	4	3	2386	1.39	18	8	<2	2	203	49.8	5	<2	39	22.74	.047	3	3	10.06	82<.01	4	.17	<.01	.11	<2	<5	<1	.01	
RE AU-24	2	16	1425	5303	3.8	4	3	2421	1.37	13	<5	<2	<2	207	49.3	5	3	39	23.07	.046	3	4	10.18	82<.01	5	.16	<.01	.12	<2	<5	<1	.01	
RRE AU-24	2	14	1620	5096	3.9	4	3	2316	1.41	14	9	<2	3	200	46.7	5	<2	39	22.04	.045	4	4	9.71	85<.01	5	.16	<.01	.11	<2	<5	<1	.01	
AU-25	3	2	1212	727	2.0	7	1	679	.98	5	<5	<2	<2	231	6.9	<2	<2	17	26.58	.022	4	4	8.92	28<.01	5	.03	<.01	.02	<2	<5	<1	.01	
AU-26	2	2	146	433	.5	2	1	296	.38	6	<5	<2	<2	213	3.3	<2	<2	19	37.53	.087	3	3	3.35	65<.01	3	.04	<.01	.02	<2	<5	<1	<.01	
AU-27	3	3	459	1622	1.4	4	1	298	.98	8	8	<2	<2	287	13.0	<2	<2	30	31.61	.108	4	4	5.83	73<.01	5	.08	<.01	.05	<2	<5	<1	.03	
AU-28	1	2	33	92	.4	1	1	191	.22	5	<5	<2	<2	185	.8	2	<2	6	37.62	.009	3	1	2.53	12<.01	3	.01	<.01	<.01	<2	<5	<1	.01	
AU-29	1	723	24	67	1.0	17	157	4114	28.92	48	5	<2	<2	63	.9	<2	6	42	5.99	.006	<1	<1	3.93	11<.01	<3	.44	<.01	<.01	<2	<5	<1	<.01	
AU-30	2	18	172	694	1.2	5	5	6224	2.23	17	<5	<2	4	181	6.9	7	2	12	21.15	.013	5	6	9.36	85 .01	4	.48	.01	.19	<2	<5	<1	.01	
AU-31	2	29	360	677	3.0	5	8	7488	2.30	46	<5	<2	3	242	6.6	12	7	10	20.77	.006	3	<1	9.29	18<.01	4	.09	<.01	.04	<2	<5	<1	.02	
AU-32	4	9	133	1230	.7	2	1	2070	.91	20	<5	<2	<2	265	11.4	2	<2	9	22.86	.010	3	4	10.21	32<.01	7	.10	.01	.06	<2	<5	<1	.01	
STANDARD C3/AU-1	25	65	39	162	5.6	35	14	817	3.54	56	26	3	19	32	26.1	18	26	82	.62	.094	18	168	.67	154	.10	20	1.96	.04	.18	23	<5	1	3.33

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 20 1997 DATE REPORT MAILED: *Mar 26 1997* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Date *3-26-97* FA *[Signature]*



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	gm/t
AU-33	3	9	1007	666	4.6	4	3	5216	2.05	38	<5	<2	2	237	10.6	4	6	6	22.32	.009	4	1	9.31	56<.01	8	.23<.01	.12	<2	<5	<1	.01			
AU-34	6	23	822	1028	6.9	4	6	6488	2.04	17	<5	<2	<2	274	15.0	15	19	8	21.17	.011	3	2	9.94	50 .01	5	.24<.01	.14	<2	<5	<1	.02			
AU-35	3	49	94	376	.8	7	17	7521	3.20	61	<5	<2	<2	204	5.3	7	<2	14	19.61	.007	3	<1	8.88	40<.01	9	.30<.01	.12	<2	<5	<1	<.01			
AU-36	4	114	183	8522	4.5	20	43	5338	7.13	781	<5	<2	<2	185	83.4	51	6	20	17.58	.007	3	<1	8.39	13<.01	<3	.13<.01	.03	<2	<5	<1	.06			
AU-37	4	116	5670	83944	27.7	11	31	3291	4.99	707	<5	<2	<2	159	893.5	41	42	20	15.35	.014	2	<1	7.47	10<.01	<3	.11<.01	.02	<2	<5	<1	.11			
AU-38	2	13	133	754	1.3	3	4	2702	1.27	18	9	<2	<2	206	9.3	5	2	12	22.08	.016	5	1	10.29	33<.01	5	.12<.01	.06	<2	<5	<1	.01			
AU-39	<1	4	21	40	.6	1	2	4588	.97	9	<5	<2	<2	201	.6	2	5	<1	20.49	.006	2	2	9.62	15<.01	<3	.06<.01	.03	<2	<5	<1	.15			
RE AU-39	2	4	27	39	1.6	2	2	4512	.95	7	<5	<2	<2	199	.4	3	7	1	20.32	.006	3	3	9.53	15<.01	5	.06<.01	.03	<2	<5	<1	.40			

Sample type: CORE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

ASSAY CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1274R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
AU-1	<.001	.002	.25	2.07	.11	<.001	.001	.48	3.25	.01	<.01	<.01	.021	.076	<.01
AU-22	<.001	.003	.67	1.21	.45	<.001	<.001	.21	1.77	<.01	<.01	<.01	.008	.002	<.01
AU-23	<.001	.011	2.21	7.47	1.53	.002	.001	.23	7.12	<.01	<.01	<.01	.046	.003	.01
AU-37	<.001	.011	.63	10.24	.79	.001	.003	.35	5.68	.06	<.01	<.01	.094	.004	.01
RE AU-37	<.001	.011	.62	10.10	.78	.001	.003	.34	5.60	.07	<.01	<.01	.091	.004	.01
STANDARD R-1	.090	.853	1.36	2.31	2.99	.025	.028	.09	6.74	.97	.01	.01	.050	.165	.03

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 9 1997 DATE REPORT MAILED: April 16/97 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1275

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	gm/t
JU 2433 6.5-8	10	676	45	36	2.5	6	56	4066	21.09	122	18	<2	8	31	<.2	7	18	4	1.68	.009	<1	<1	.91	23<.01	<3	.23	.01	.15	57	<5	<1	.03	
JU 2456 34.5-40	<1	294	1704	118	18.9	3	53	10008	22.50	6027	<5	<2	<2	99	1.1	298	27	7	5.19	.008	<1	<1	2.79	6<.01	<3	<.01	<.01	.01	<2	<5	<1	1.20	
JU 2486 3.7-10.3	2	53	7223	75598	7.3	12	15	4530	3.40	3356	<5	<2	<2	120	938.6	24	63	30	16.20	.009	2	<1	8.28	25<.01	9	.13	.01	.06	24	<5	<1	.32	
JU 2584 7-8.9	<1	312	81	262	1.6	2	39	12534	28.54	76	<5	<2	<2	62	4.0	<2	3	<1	7.06	.004	1	<1	3.40	4<.01	<3	.01	<.01	.01	<2	<5	1	.02	
JU 2584 8.9-18.5	2	35	641	3494	2.3	4	9	5661	4.34	989	<5	<2	<2	211	31.4	53	4	6	18.95	.009	1	<1	8.85	18<.01	4	.05	.01	.02	<2	<5	<1	.16	
JU 2584 18.5-25	<1	224	1377	2980	16.9	2	54	6295	22.32	928	<5	<2	<2	42	27.1	258	10	6	2.15	.008	2	<1	1.56	6<.01	<3	.04	.02	.01	<2	<5	<1	1.00	
JU 2613 0-1.5	2	42	204	978	6.5	4	34	5744	8.99	12712	<5	<2	<2	143	19.8	58	144	5	9.82	.022	<1	<1	5.13	10<.01	<3	.03	.01	.01	<2	<5	<1	.65	
RE JU 2613 0-1.5	2	42	220	974	6.4	4	34	5851	9.09	12639	<5	<2	<2	146	19.6	59	147	5	9.95	.023	2	<1	5.16	10<.01	3	.03	.01	.01	<2	<5	<1	.70	
RRE JU 2613 0-1.5	2	42	223	765	6.3	6	33	6013	8.07	13146	<5	<2	<2	145	15.7	65	156	4	9.78	.024	1	<1	4.82	10<.01	<3	.02	.01	.01	3	<5	<1	.66	
JU 2771 10-14	<1	308	25	9	.9	2	130	6067	28.61	561	7	<2	<2	34	<.2	<2	<2	5	3.56	.026	<1	<1	1.30	5<.01	<3	.01	<.01	.01	<2	<5	<1	.08	
JU 2771 14-18.8	1	85	174	27	.5	1	21	8324	5.11	60	<5	<2	<2	205	1.1	<2	<2	4	28.40	.015	2	<1	1.07	13<.01	<3	.01	<.01	.01	<2	<5	<1	<.01	
JU 2771 18.8-20.8	3	64	157	199	1.6	5	33	8241	5.99	37	<5	<2	<2	133	3.1	2	13	8	19.33	.008	2	<1	9.23	25<.01	<3	.05	<.01	.04	<2	<5	<1	<.01	
JU 2774 0-2.5	<1	521	6	7	<.3	5	141	4609	38.72	9	<5	<2	<2	29	.6	3	<2	4	2.18	.010	<1	<1	.76	4<.01	<3	<.01	.01	.01	13	<5	3	.02	
JU 2774 2.5-9	6	120	286	5900	9.6	10	34	7584	8.37	2626	12	<2	<2	156	49.1	19	21	16	17.70	.110	3	<1	9.11	17<.01	<3	.06	<.01	.02	<2	<5	<1	.02	
STANDARD C3/AU-1	27	69	37	153	5.8	38	14	830	3.63	54	27	<2	23	33	25.2	21	21	86	.60	.097	20	179	.67	149	.13	22	2.00	.04	.19	22	<5	<1	3.23

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPM

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 19 1997 DATE REPORT MAILED: *Mar 26/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1275R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn % oz/t	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
JU 2486 3.7-10.3	<.001	.005	.75	8.77	.14	.001	.001	.44	4.24	.36	<.01	<.01	.095	.002	.01

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

DATE RECEIVED: APR 9 1997

DATE REPORT MAILED: April 16/97

SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL ANALYSIS CERTIFICATE

Sultan Minerals PROJECT JERSEY

File # 97-1314

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

Submitted by: L. Dandy

AA

APR 04 1997

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm
AU-40	2	4	126	13046	.5	8	3	247	1.10	5	10	<2	<2	260	95.2	<2	<2	6	21.09	.010	6	8	9.55	181	.01	9	.39	.02	.26	<2	<5	1	.01
AU-41	2	9	288	29544	1.2	8	5	1376	2.55	14	<5	<2	2	229	248.6	3	<2	8	19.23	.016	6	7	8.79	121	.01	6	.43	.01	.24	<2	<5	1	<.01
AU-42	4	5	2324	9354	4.8	4	1	1199	1.04	15	<5	<2	<2	283	77.5	14	<2	13	21.86	.012	3	3	10.06	74	<.01	6	.13	.01	.09	<2	<5	1	<.01
AU-43	6	<1	55	382	.3	2	<1	767	.53	<2	8	<2	<2	221	3.5	<2	<2	6	22.90	.007	2	3	11.10	52	<.01	5	.09	<.01	.06	<2	<5	<1	.04
AU-44	31	1	44	202	.3	2	<1	886	.52	<2	6	<2	2	236	1.9	<2	<2	3	22.76	.006	2	2	11.12	16	<.01	4	.03	<.01	<.01	<2	<5	1	.09
AU-45	40	1	47	170	.3	2	<1	874	.45	2	6	<2	<2	238	1.5	<2	4	5	22.89	.006	2	2	11.12	12	<.01	4	.04	<.01	.01	<2	<5	<1	<.01
AU-46	16	1	37	89	.4	2	<1	1838	.59	3	<5	<2	3	215	1.0	<2	<2	3	22.28	.007	1	2	10.83	12	<.01	4	.03	<.01	<.01	<2	<5	<1	<.01
AU-47	14	2	66	134	.6	2	<1	3098	.84	4	<5	<2	7	244	1.4	<2	<2	3	21.19	.004	2	3	10.16	29	<.01	3	.07	<.01	.03	<2	9	<1	<.01
AU-48	5	<1	92	103	.3	1	<1	870	.58	<2	<5	<2	<2	265	1.1	<2	<2	3	22.23	.005	3	1	10.79	49	<.01	4	.05	<.01	.03	<2	<5	<1	<.01
RE AU-48	5	<1	94	105	<.3	1	<1	885	.59	<2	5	<2	<2	270	1.1	<2	<2	4	22.56	.005	2	2	10.94	50	<.01	4	.05	<.01	.02	<2	<5	<1	<.01
RRE AU-48	6	<1	107	92	.4	1	<1	903	.59	3	<5	<2	<2	265	.9	<2	<2	3	22.33	.005	2	2	10.82	50	<.01	3	.05	<.01	.03	<2	<5	<1	<.01
AU-49	2	6	46	110	.5	2	1	1301	.75	53	10	<2	2	286	1.0	<2	<2	3	21.52	.005	2	3	10.48	20	<.01	4	.04	<.01	<.01	<2	<5	<1	<.01
AU-50	2	11	17	1428	.4	3	4	2732	1.38	24	<5	<2	4	278	10.0	2	<2	6	21.91	.020	4	2	10.44	12	<.01	4	.03	<.01	<.01	<2	5	<1	<.01
AU-51	10	6	127	814	.6	3	2	2973	1.03	10	<5	<2	8	283	6.1	<2	<2	6	22.08	.013	2	2	10.54	18	<.01	3	.04	<.01	.02	<2	7	<1	<.01
STANDARD C3/AU-1	25	63	37	155	5.4	36	12	731	3.29	56	20	4	17	32	23.8	14	28	80	.66	.091	18	164	.68	148	.09	21	1.87	.04	.17	21	<5	1	3.49

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 24 1997

DATE REPORT MAILED: Mar 27/97

SIGNED BY: *[Signature]* F.D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



ASSAY CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1314R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
AU-40	<.001	<.001	.01	1.29	<.01	.001	<.001	.03	1.15	<.01	<.01	<.01	.010	<.001	<.01
AU-41	<.001	<.001	.03	3.13	.01	.001	.001	.15	2.83	<.01	<.01	<.01	.026	<.001	<.01
AU-42	<.001	<.001	.25	.96	.14	.001	<.001	.13	1.09	<.01	<.01	<.01	.008	.002	<.01
RE AU-42	<.001	<.001	.25	.97	.15	<.001	<.001	.13	1.10	<.01	<.01	<.01	.008	.002	<.01

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 9 1997 DATE REPORT MAILED: April 16/97 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL ANALYSIS CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1465

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	gm/t
74G-1 CHIP	3	152	62	171	1.0	9	11	7806	5.44	70	<5	<2	2	133	2.2	4	<2	20	17.82	.013	1	2	8.49	25<.01	<3	.07	.03	.03	2	<5	<1	.02	
74G-2 CHIP	5	67	407	2206	2.5	5	12	6616	5.57	62	<5	<2	<2	125	22.8	2	<2	13	18.45	.007	1	2	8.80	26<.01	<3	.07	<.01	.03	<2	<5	<1	<.01	
74G-3 CHIP	1	28	109	126	4.8	<1	1	9524	1.69	13	<5	<2	4	112	1.5	15	200	9	17.92	.006	<1	6	7.52	18<.01	4	.06	<.01	.02	4	<5	<1	.04	
74G-4 CHIP	2	26	1611	5926	4.9	3	4	2299	1.22	17	<5	<2	<2	154	56.8	9	2	41	22.27	.095	1	5	10.26	22<.01	5	.03	<.01	.01	<2	<5	<1	<.01	
74G-5 CHIP	8	38	7176	42625	19.7	7	26	7356	4.57	125	6	<2	2	130	432.3	18	46	27	17.40	.099	1	6	8.44	24<.01	<3	.05	<.01	.02	<2	<5	<1	.06	
84F-1 CHIP	<1	469	82	393	2.5	1	190	6400	25.33	191	<5	<2	<2	41	3.0	2	<2	7	4.33	.010	<1	10	1.58	10<.01	<3	.02	<.01	<.01	<2	<5	<1	.03	
84F-2 CHIP	<1	289	77	171	1.4	1	86	6490	17.57	179	<5	<2	<2	76	1.1	<2	<2	5	10.31	.004	<1	6	1.68	10<.01	<3	.01	<.01	<.01	4	<5	<1	.03	
84F-3 CHIP	<1	317	35	48	.5	1	101	3453	26.67	69	<5	<2	<2	50	<2	<2	<2	3	5.63	.002	<1	6	.31	6<.01	<3	.01	<.01	<.01	<2	<5	<1	<.01	
84F-4 CHIP	<1	105	392	61	10.5	1	39	6270	20.90	1324	<5	<2	2	38	.5	5	20	5	3.82	.007	<1	4	1.32	5<.01	<3	.01	<.01	<.01	3	<5	<1	1.92	
84F-5 CHIP	<1	243	45	133	.6	4	49	4738	13.09	62	<5	<2	2	104	1.3	<2	<2	19	12.09	.032	<1	8	6.36	41<.01	<3	.32	<.01	.05	2	<5	<1	<.01	
90F-1 CHIP	15	64	907	7423	4.9	44	61	3477	7.08	190	<5	<2	2	133	52.8	16	10	23	15.54	.030	2	2	8.29	10<.01	<3	.03	<.01	<.01	<2	<5	<1	.09	
90F-2 CHIP	26	186	601	18272	4.3	56	15	1099	16.95	85	<5	<2	<2	55	120.7	35	15	31	4.94	.021	<1	7	5.21	9<.01	<3	.02	<.01	<.01	<2	<5	<1	.20	
90F-3 CHIP	27	328	8438	18841	13.6	61	20	1029	16.50	619	<5	<2	<2	47	136.8	137	5	30	5.55	.011	<1	6	5.49	10<.01	<3	.03	<.01	.01	<2	<5	<1	.23	
90F-4 CHIP	11	35	6432	30126	4.6	25	4	572	5.37	65	<5	<2	<2	108	214.6	43	<2	34	11.87	.015	1	5	7.29	16<.01	<3	.04	<.01	.01	<2	<5	1	.02	
90F-5 CHIP	21	97	2117	17659	9.6	40	13	1355	10.93	864	<5	<2	<2	48	81.8	44	11	28	5.69	.015	<1	4	6.07	10<.01	<3	.02	<.01	.01	<2	<5	<1	.16	
90F-6 CHIP	3	37	1214	2340	3.0	6	7	2663	3.58	187	<5	<2	<2	130	17.1	27	3	31	15.79	.013	1	2	6.19	37<.01	<3	.03	<.01	.01	<2	<5	<1	.04	
90F-7 CHIP	3	232	941	2541	3.2	14	64	5927	16.94	119	<5	<2	<2	49	14.7	9	<2	24	4.79	.017	<1	4	3.11	7<.01	<3	.01	<.01	<.01	<2	<5	<1	.12	
90F-8 CHIP	16	24	12146	40115	11.8	46	7	363	11.70	190	15	<2	<2	47	255.5	67	4	33	5.59	.016	<1	7	6.76	12<.01	<3	.03	<.01	.01	<2	<5	2	.07	
RE 90F-8 CHIP	14	22	10916	37693	10.8	41	6	325	10.47	181	<5	<2	2	42	227.2	62	<2	32	5.41	.016	<1	6	6.08	11<.01	<3	.03	<.01	<.01	<2	<5	2	.07	
74G-1 GRAB	2	60	79	208	.5	7	11	6987	5.40	72	<5	<2	3	100	2.0	2	<2	15	14.91	.009	1	4	7.38	19<.01	<3	.05	<.01	.01	2	<5	<1	.02	
74G-2 GRAB	3	64	108	821	1.1	5	16	4734	6.18	36	<5	<2	<2	113	7.7	2	<2	9	16.49	.004	1	1	8.52	18<.01	<3	.05	<.01	.02	<2	<5	<1	<.01	
84F-1 GRAB	<1	439	35	27	3.1	1	270	5065	24.89	89	<5	<2	<2	24	<2	<2	<2	6	2.90	.006	<1	12	1.15	9<.01	<3	.02	<.01	<.01	2	<5	<1	<.01	
84F-2 GRAB	<1	290	33	54	.4	2	99	3782	24.02	56	<5	<2	<2	19	<2	<2	<2	2	2.12	.011	<1	9	.71	4<.01	<3	.01	<.01	<.01	2	<5	<1	<.01	
84F-3 GRAB	<1	631	14	14	.6	3	133	677	28.72	40	<5	<2	<2	8	<2	<2	<2	1	.41	.003	<1	9	.07	3<.01	6	.01	<.01	<.01	2	<5	<1	<.01	
84F-4 GRAB	<1	16	476	59	12.5	1	35	6190	15.08	1904	<5	<2	<2	21	<2	3	23	9	1.75	.015	<1	6	1.28	6<.01	<3	.01	<.01	<.01	4	<5	<1	3.76	
84F-5 GRAB	<1	660	11	36	.7	8	137	2862	34.10	23	<5	<2	2	19	.3	<2	5	30	1.29	.002	<1	9	1.40	60 .01	<3	1.00	.01	.13	<2	<5	<1	.02	
90F-1 GRAB	23	292	1541	12869	23.0	115	184	1896	22.43	1147	5	<2	<2	45	90.6	30	76	25	2.76	.028	<1	12	3.77	7<.01	<3	.02	<.01	<.01	<2	<5	<1	.23	
90F-2 GRAB	22	286	1918	12879	10.9	76	44	687	20.78	151	5	<2	<2	71	83.1	79	12	37	6.01	.025	<1	7	5.72	12<.01	<3	.03	<.01	<.01	<2	<5	<1	.36	
90F-3 GRAB	19	237	2629	12112	9.4	85	11	1460	21.72	188	12	<2	<2	41	81.7	62	14	27	3.32	.014	<1	10	3.78	9<.01	<3	.03	<.01	.01	<2	<5	<1	.21	
90F-4 GRAB	9	39	3679	62757	4.1	14	3	1015	4.77	63	<5	<2	2	135	442.6	22	<2	31	11.00	.020	3	8	6.82	28<.01	<3	.03	<.01	<.01	<2	<5	3	.03	
90F-5 GRAB	26	155	1344	20082	4.6	52	20	2267	15.27	356	<5	<2	<2	72	116.7	18	6	30	7.31	.019	<1	8	7.16	17<.01	<3	.03	<.01	.01	<2	<5	<1	.06	
90F-6 GRAB	2	86	129	615	1.9	6	19	6867	8.32	479	5	<2	<2	258	4.2	19	<2	14	20.21	.016	3	2	1.89	27<.01	<3	.03	<.01	<.01	3	<5	<1	.14	
90F-7 GRAB	<1	365	56	122	2.9	4	83	1783	30.06	111	5	<2	<2	9	<2	5	<2	3	.46	.012	<1	4	.09	4<.01	3	.01	<.01	<.01	<2	<5	<1	.11	
90F-8 GRAB	6	66	11210	33390	9.3	49	6	192	13.68	567	7	<2	<2	35	153.5	1043	8	26	1.28	.004	<1	12	.86	4<.01	<3	.02	<.01	<.01	<2	<5	<1	.29	
STANDARD C3/AU-1	25	63	32	160	5.4	36	12	709	3.25	57	20	4	19	30	24.2	18	25	80	.59	.090	17	165	.63	146 .09	20	1.84	.04	.16	24	<5	1	3.24	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS &gt; 1%, AG &gt; 30 PPM &amp; AU &gt; 1000 PPB

- SAMPLE TYPE: ROCK AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 31 1997 DATE REPORT MAILED: Apr 8/97 SIGNED BY: J.W. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## ASSAY CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1465R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
74G-5 CHIP	.001	.003	.77	4.94	.57	.001	.003	.78	4.91	.01	<.01	<.01	.047	.002	.01
90F-2 CHIP	.003	.022	.07	2.21	.17	.008	.002	.13	23.74	.01	<.01	<.01	.015	.004	<.01
90F-3 CHIP	.003	.043	1.10	2.37	.48	.006	.002	.13	22.05	.07	<.01	<.01	.018	.017	<.01
90F-4 CHIP	.001	.004	.78	4.09	.16	.003	<.001	.08	7.12	.01	<.01	<.01	.027	.006	<.01
90F-5 CHIP	.002	.012	.28	2.36	.38	.006	.001	.19	15.47	.11	<.01	<.01	.011	.006	<.01
90F-8 CHIP	.001	.001	1.57	5.42	.39	.005	<.001	.04	14.53	.02	<.01	<.01	.030	.008	<.01
90F-1 GRAB	.006	.031	.18	1.39	.73	.015	.026	.19	32.12	.14	<.01	<.01	.010	.003	.01
90F-2 GRAB	.002	.029	.21	1.42	.32	.008	.004	.07	23.03	.01	<.01	<.01	.010	.009	<.01
90F-3 GRAB	.004	.028	.33	1.47	.32	.012	.001	.16	31.31	.02	<.01	<.01	.010	.007	.01
RE 90F-3 GRAB	.005	.028	.33	1.48	.35	.013	.001	.17	31.56	.02	<.01	<.01	.011	.008	<.01
90F-4 GRAB	.001	.003	.45	8.85	.09	.002	<.001	.13	6.14	.01	<.01	<.01	.056	.003	<.01
90F-5 GRAB	.002	.015	.14	2.10	.14	.005	.001	.24	17.05	.03	<.01	<.01	.013	.002	<.01
90F-8 GRAB	.002	.008	1.75	4.36	.32	.012	.001	.02	39.84	.10	<.01	<.01	.021	.139	<.01
STANDARD R-1	.089	.846	1.30	2.27	3.00	.024	.027	.08	6.68	1.00	.01	.01	.049	.164	.03

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: ROCK PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 9 1997

DATE REPORT MAILED:

April 16/97

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1466

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
AU-52	10	69	17197	66536	37.0	13	11	1278	7.47	145	12	<2	4	125	701.5	52	8	21	12.37	.025	6	10	8.84	32<.01	<3	.08<.01	.03	7	<5	2	.05			
AU-53	2	30	119	1159	.9	5	12	4461	2.46	35	<5	<2	<2	123	11.2	3	<2	15	23.21	.011	3	2	10.79	17<.01	5	.04<.01<.01	<2	<5	<1	.01				
AU-54	2	27	52	485	1.8	5	12	6554	2.50	22	6	<2	2	120	4.8	3	<2	17	22.99	.007	3	3	10.49	18<.01	5	.04<.01<.01	<2	<5	<1	.13				
AU-55	5	26	19	477	.5	5	10	7555	2.97	20	<5	<2	<2	174	4.7	2	<2	7	23.07	.008	2	2	10.48	24<.01	4	.06<.01	.03	<2	<5	<1	.01			
AU-56	3	24	79	164	1.3	5	13	9321	2.94	127	<5	<2	<2	156	2.2	2	<2	25	22.91	.050	3	3	10.13	35<.01	3	.08<.01	.04	<2	<5	<1	.02			
AU-57	8	29	22133	64851	267.5	11	28	3113	4.78	290	<5	<2	4	120	771.8	123	324	19	15.68	.012	3	9	8.51	18<.01	<3	.04<.01<.01	<2	<5	3	.08				
AU-58	4	16	900	10295	3.2	6	11	5138	2.64	48	6	<2	<2	179	100.5	5	<2	20	22.97	.039	2	5	10.58	23<.01	4	.04<.01	.02	<2	<5	<1	<.01			
AU-59	2	4	39	1791	.5	5	1	1464	1.17	32	6	<2	<2	306	14.2	2	<2	14	25.33	.007	4	3	11.17	62<.01	6	.08<.01	.05	<2	<5	<1	<.01			
AU-60	1	20	687	116	1.9	1	6	1391	1.65	135	<5	<2	<2	190	1.8	4	<2	2	36.90	.010	1	<1	.50	6<.01	3	.01<.01<.01	<2	<5	<1	<.01				
AU-61	1	1	46	60	.3	2	<1	374	.23	7	<5	<2	<2	143	.8	<2	2	4	36.42	.009	2	3	2.32	21<.01	4	.01<.01<.01	<2	<5	<1	.02				
AU-62	<1	326	65	28	.9	<1	83	10078	21.50	485	<5	<2	6	122	.5	<2	<2	5	12.00	.006	1	9	2.66	11<.01	<3	.01<.01<.01	<2	5	<1	.03				
RE AU-62	<1	337	62	26	.8	<1	86	9819	21.36	633	<5	<2	6	121	.6	4	<2	4	12.14	.006	1	9	2.58	10<.01	<3	.01<.01<.01	<2	<5	<1	.03				
RRE AU-62	<1	308	63	24	1.1	<1	78	9180	20.22	439	<5	<2	3	113	<.2	<2	<2	4	11.46	.006	1	7	2.41	10<.01	<3	.01<.01<.01	<2	<5	<1	.05				
AU-63	<1	266	70	17	1.1	2	68	4795	22.70	200	<5	<2	4	88	<.2	<2	<2	3	6.39	.005	<1	9	1.07	10<.01	3	.01<.01<.01	2	<5	<1	.05				
AU-64	<1	12	157	98	.3	<1	4	2076	.88	13	<5	<2	<2	184	1.2	2	<2	5	31.72	.010	1	2	1.01	24<.01	<3	.01<.01<.01	<2	<5	<1	<.01				
AU-65	<1	107	164	77	4.2	2	48	5293	6.20	1724	11	<2	<2	376	1.5	83	7	6	20.20	.009	1	1	1.21	28<.01	<3	.01<.01	.01	<2	<5	<1	.28			
AU-66	4	64	1367	5096	24.2	5	26	9165	4.97	169	<5	<2	3	134	48.4	13	84	12	18.17	.027	3	3	8.18	26<.01	<3	.05<.01	.03	<2	<5	<1	.06			
AU-67	2	31	31	197	1.1	3	19	10603	3.68	74	<5	<2	<2	132	2.1	5	5	10	15.64	.009	2	6	6.76	24<.01	<3	.07<.01	.06	<2	5	<1	.05			
AU-68	1	56	71	768	1.1	7	24	9113	5.27	92	<5	<2	<2	162	6.6	8	<2	12	17.90	.011	3	5	7.73	68 .01	<3	.29<.01	.17	<2	<5	<1	.05			
AU-69	3	75	32	21	1.1	12	60	10573	6.47	427	<5	<2	2	112	.6	4	<2	4	14.33	.004	2	6	6.19	13<.01	<3	.03<.01	.01	2	5	<1	.09			
AU-70	2	63	19	54	.6	3	27	12878	5.48	441	<5	<2	<2	155	1.0	<2	<2	9	19.17	.010	3	3	8.48	22<.01	<3	.05<.01	.04	<2	7	<1	.08			
AU-71	3	95	174	944	2.3	5	51	11317	7.43	406	<5	<2	2	120	7.8	<2	<2	12	14.41	.022	2	7	6.24	24<.01	<3	.11<.01	.09	<2	6	<1	.04			
AU-72	3	76	1024	2213	4.0	4	34	9592	5.52	36	<5	<2	<2	138	19.2	3	3	15	19.76	.023	4	4	8.96	23<.01	<3	.12<.01	.07	<2	5	<1	.02			
RE AU-72	3	73	972	2191	3.7	4	32	9403	5.55	26	<5	<2	<2	136	18.9	<2	5	14	19.39	.024	3	4	8.80	22<.01	<3	.12<.01	.07	<2	<5	<1	.02			
RRE AU-72	3	73	1000	2191	3.7	4	32	9380	5.71	27	<5	<2	2	137	18.7	2	9	15	19.20	.022	3	3	8.77	22<.01	<3	.12<.01	.07	<2	<5	<1	.02			
AU-73	1	91	554	500	2.0	5	39	9557	9.93	153	<5	<2	<2	111	4.3	<2	<2	11	13.75	.015	2	4	7.13	17<.01	<3	.10<.01	.07	<2	<5	<1	.01			
AU-74	1	81	18	102	.6	4	30	6724	5.70	300	<5	<2	<2	127	1.6	6	<2	6	16.27	.006	3	2	7.38	12<.01	<3	.05<.01	.02	<2	<5	<1	.02			
AU-75	1	5	<3	476	<.3	1	2	3924	1.09	24	<5	<2	<2	134	3.3	<2	<2	8	22.68	.009	3	3	10.10	25<.01	5	.06<.01	.03	<2	<5	<1	.01			
AU-76	1	19	131	413	.5	3	6	3345	1.63	13	<5	<2	<2	139	3.6	<2	<2	13	22.21	.009	3	3	10.28	47<.01	5	.08<.01	.05	<2	<5	<1	<.01			
AU-77	3	68	560	534	.8	5	24	4637	5.55	57	<5	<2	<2	155	6.0	2	<2	77	19.55	.010	3	4	9.03	59<.01	<3	.10<.01	.07	<2	<5	<1	.01			
STANDARD C3/AU-1	25	66	34	161	5.6	36	12	716	3.26	55	27	3	19	30	23.9	16	25	83	.62	.090	19	167	.64	147	.10	20	1.89	.04	.17	23	<5	1	3.43	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 31 1997 DATE REPORT MAILED: April 10/97 SIGNED BY: *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL/ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1467  
 P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
AU-78	2	3	316	288	.8	4	<1	472	.88	4	<5	<2	<2	174	2.5	<2	2	92	27.69	.010	3	7	6.99	31<.01	19	.05	.01	.03	<2	<5	<1	<.01		
AU-79	2	3	17	35	<.3	3	<1	164	.23	6	<5	<2	<2	194	.5	<2	<2	7	35.35	.007	2	2	.72	26<.01	23	.04	.01	.02	2	<5	<1	<.01		
AU-80	1	8	21	134	.5	7	<1	105	.93	5	<5	<2	<2	164	1.3	2	<2	4	38.04	.038	2	<1	.14	28<.01	<3	.01	<.01	<.01	<2	<5	<1	<.01		
AU-81	3	12	451	2966	.9	8	2	882	2.66	14	<5	<2	<2	162	22.1	<2	<2	13	23.95	.011	4	6	9.59	227.01	6	.40	.01	.26	<2	<5	<1	<.01		
AU-82	6	9	441	49088	1.2	6	4	663	2.61	7	<5	<2	<2	165	394.1	<2	<2	6	22.84	.018	3	11	7.38	84.01	14	.42	.01	.20	<2	<5	1	.02		
AU-83	2	7	19	536	.4	4	3	4435	1.61	132	<5	<2	<2	188	4.2	2	<2	7	22.73	.008	2	3	10.10	51<.01	8	.12	<.01	.06	<2	<5	<1	.02		
AU-84	1	4	159	306	.5	4	2	3872	1.36	17	<5	<2	<2	169	2.4	2	<2	8	23.24	.008	3	5	9.96	226.01	7	.24	.01	.15	<2	<5	<1	.11		
AU-85	3	4	96	219	.5	2	1	957	.78	10	<5	<2	<2	278	1.7	<2	<2	8	23.90	.007	1	2	10.12	10<.01	<3	.03	<.01	.01	<2	<5	<1	<.01		
AU-86	1	17	300	441	.8	5	1	680	1.26	6	<5	<2	<2	313	3.6	<2	<2	12	24.09	.014	2	3	10.47	9<.01	<3	.04	<.01	.03	<2	<5	<1	.03		
AU-87	17	59	9003	6223	20.1	5	2	594	1.97	118	5	<2	<2	388	46.3	43	47	22	23.09	.136	3	5	10.11	35<.01	<3	.07	.01	.05	<2	<5	<1	.02		
AU-88	6	1	81	257	.4	4	1	232	.54	<2	<5	<2	<2	473	2.3	<2	2	8	31.06	.010	4	6	4.47	163.01	<3	.38	.02	.26	<2	<5	<1	<.01		
AU-89	4	2	97	147	.5	4	1	394	.77	78	<5	<2	<2	406	1.2	<2	<2	8	25.76	.011	3	5	9.54	128.01	4	.20	.02	.17	<2	<5	<1	<.01		
AU-90	15	3	16	108	.3	4	1	486	.89	5	<5	<2	<2	416	.9	<2	<2	18	25.53	.022	3	3	9.19	302<.01	<3	.10	<.01	.03	<2	<5	<1	<.01		
RE AU-90	18	3	18	107	<.3	3	<1	467	.86	<2	<5	<2	<2	404	.9	<2	<2	18	24.49	.019	2	3	8.91	292<.01	<3	.10	.01	.03	<2	<5	<1	<.01		
RRE AU-90	12	2	15	97	.3	3	<1	485	.85	<2	<5	<2	<2	413	.5	<2	<2	17	25.49	.022	3	4	9.12	266<.01	<3	.09	<.01	.02	<2	<5	<1	<.01		
AU-91	200	11	13	102	.5	2	2	2898	1.25	380	8	<2	2	54	.3	3	3	22	6.20	.029	2	<1	.83	17<.01	7	.18	.01	.02	644	<5	<1	.03		
AU-92	286	10	3	79	<.3	1	2	1933	.82	2	<5	<2	<2	14	<.2	<2	<2	10	3.65	.025	1	<1	.29	12<.01	3	.12	.01	.01	118	<5	<1	<.01		
AU-93	3	21	16	150	.4	3	1	326	1.38	6	<5	<2	<2	146	1.0	2	<2	28	34.40	.016	2	2	2.36	183<.01	12	.03	<.01	.02	7	<5	<1	<.01		
AU-94	31	11	32	167	.4	2	1	1130	1.13	<2	<5	<2	<2	88	.8	<2	<2	40	16.26	.031	2	<1	2.91	89<.01	13	.05	<.01	.03	472	<5	<1	<.01		
AU-95	14	10	12	147	.3	2	<1	2133	.53	<2	<5	<2	<2	76	.8	2	2	13	18.31	.022	2	<1	1.09	37<.01	28	.02	<.01	.01	510	<5	<1	<.01		
AU-96	5	40	9	65	.3	1	3	672	.60	<2	<5	<2	<2	83	.8	4	61	6	22.17	.028	2	4	.83	9<.01	4	.01	<.01	.01	36	<5	<1	.15		
AU-97	2	47	80	9028	.8	5	2	562	1.77	143	<5	<2	<2	292	78.3	3	<2	25	22.84	.014	3	5	9.39	30<.01	<3	.06	<.01	.04	<2	<5	<1	.01		
STANDARD C3/AU-1	26	66	34	155	5.7	36	12	736	3.38	58	22	3	20	32	24.3	18	24	84	.64	.090	19	168	.65	152.10	21	1.95	.04	.19	23	<5	2	3.32		

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 31 1997 DATE REPORT MAILED: *Apr 8/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## ASSAY CERTIFICATE

AA  
LLAA  
LL

Sultan Minerals PROJECT JERSEY File # 97-1467R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn %	AG oz/t	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %
AU-82	<.001	<.001	.05	5.76	<.01	<.001	.001	.07	2.89	<.01	<.01	<.01	.043	<.001	<.01
AU-87	.003	.006	1.09	.69	.59	<.001	<.001	.06	2.05	.01	<.01	<.01	.005	.005	.01
AU-97	<.001	.005	.01	1.00	.01	<.001	<.001	.06	1.88	.02	<.01	<.01	.008	.001	<.01
RE AU-97	<.001	.005	.01	1.01	.02	<.001	<.001	.06	1.88	.02	<.01	<.01	.008	<.001	<.01

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 9 1997

DATE REPORT MAILED: April 16/97

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL/ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1468

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au** gm/t
AU-98	3	6	315	1481	.7	5	1	208	.86	8	<5	<2	<2	142	8.5	3	<2	11	12.42	.008	1	6	5.43	45<.01	9	.04<.01	.02	<2	<5	<1	<.01		
AU-99	4	1	274	598	.6	6	1	304	.97	9	7	<2	<2	200	4.5	6	<2	16	24.15	.019	3	5	9.81	101<.01	5	.25 .01	.11	<2	<5	<1	<.01		
AU-100	7	13	623	47708	2.2	9	5	373	3.02	14	<5	<2	<2	147	484.7	8	<2	10	19.05	.038	4	14	8.58	120 .01	4	.57 .01	.27	<2	<5	2	.03		
AU-101	1	2	60	962	.3	4	1	277	.74	7	<5	<2	<2	128	8.8	4	<2	5	24.40	.010	2	6	9.82	87<.01	6	.20 .01	.11	<2	<5	<1	<.01		
AU-102	5	4	12	38578	.7	4	2	280	.58	3	<5	<2	<2	190	359.1	4	<2	6	23.38	.018	2	9	7.21	87<.01	3	.22<.01	.10	<2	<5	1	.02		
AU-103	5	8	308	24116	2.2	9	2	388	4.19	8	5	<2	<2	95	199.1	3	2	5	23.20	.005	<1	4	6.41	38<.01	<3	.06<.01	.03	2	<5	<1	.27		
AU-104	6	12	167	8982	1.7	10	2	607	4.92	14	<5	<2	<2	71	67.2	7	2	5	19.70	.005	<1	3	8.70	28<.01	<3	.06<.01	.02	<2	<5	<1	.02		
AU-105	3	8	117	13630	1.4	4	2	711	3.78	14	<5	<2	<2	111	101.1	10	2	6	21.60	.005	2	3	6.77	86<.01	<3	.13<.01	.06	<2	<5	<1	<.01		
AU-106	3	7	42	4915	.6	5	1	460	1.33	8	<5	<2	<2	165	39.4	3	<2	9	24.17	.009	2	4	8.12	108 .01	5	.19 .01	.11	<2	<5	<1	<.01		
AU-107	6	10	23	1008	.4	3	2	677	.98	37	<5	<2	<2	137	9.2	3	<2	7	22.21	.005	1	3	9.67	67<.01	12	.15 .01	.10	28	<5	<1	<.01		
AU-108	3	41	811	6241	1.9	4	1	918	1.51	117	6	<2	<2	324	45.1	54	2	13	21.30	.014	1	4	8.31	51<.01	4	.09<.01	.03	<2	<5	<1	.01		
AU-109	18	3	23	330	.3	1	1	1614	.84	20	<5	<2	<2	477	3.4	3	<2	12	22.70	.006	2	3	8.75	130<.01	6	.11<.01	.05	15	<5	<1	<.01		
AU-110	7	73	167	9503	1.6	7	6	1346	4.45	411	<5	<2	2	153	61.1	9	2	10	21.13	.005	3	4	7.58	69<.01	<3	.16<.01	.04	<2	<5	1	.06		
RE AU-110	7	69	173	9345	1.6	7	6	1325	4.34	407	<5	<2	<2	149	60.1	8	<2	10	20.70	.005	2	4	7.49	68<.01	<3	.16<.01	.03	<2	<5	<1	.06		
RRE AU-110	7	67	165	9315	1.4	7	5	1215	4.12	391	<5	<2	<2	148	59.3	7	4	9	20.43	.005	3	4	7.34	62<.01	<3	.16<.01	.03	<2	<5	<1	.06		
AU-111	1	5	355	957	.9	4	1	1467	.83	19	<5	<2	<2	185	7.8	3	2	10	21.51	.015	1	3	9.24	23<.01	4	.02<.01	.01	<2	<5	<1	.01		
AU-112	26	90	743	891	4.3	11	19	9935	4.83	68	<5	<2	<2	182	8.2	5	10	20	15.70	.023	<1	3	6.37	18<.01	<3	.12<.01	.07	<2	<5	<1	<.01		
AU-113	1	8	29	40	<.3	1	3	876	2.11	25	14	<2	8	37	.2	4	3	2	.83	.004	3	3	.81	16<.01	5	.70 .02	.11	67	<5	<1	<.01		
AU-114	7	64	6956	4801	18.6	9	19	6237	5.51	36	<5	<2	3	219	36.7	9	39	58	16.08	.044	2	3	6.66	23<.01	<3	.30<.01	.18	<2	<5	<1	.02		
AU-115	7	187	5491	1372	153.3	41	74	7608	14.07	103	12	<2	2	107	13.5	27	511	43	11.71	.127	<1	6	6.46	11<.01	<3	.04<.01	.02	<2	<5	<1	.02		
AU-116	4	41	116	61	2.1	16	52	7839	7.70	429	27	<2	2	157	.3	12	11	37	12.10	.369	<1	3	5.92	10<.01	<3	.11<.01	.04	<2	<5	<1	.12		
AU-117	29	31	1575	1496	2.9	4	7	7586	2.83	95	16	<2	<2	286	12.7	13	8	61	16.98	.305	2	7	6.69	13<.01	3	.07<.01	.03	<2	<5	<1	.02		
AU-118	3	262	31	69	5.7	36	220	4696	11.84	1395	<5	<2	<2	81	.6	29	<2	5	5.48	.005	<1	3	3.84	4<.01	<3	.03<.01	<.01	<2	<5	<1	.34		
AU-119	90	9	88	77	.5	6	5	6134	1.78	28	11	<2	2	317	.7	4	4	45	22.67	.222	3	7	9.79	22<.01	5	.10<.01	.05	<2	<5	<1	<.01		
AU-120	4	7	46	180	<.3	5	4	3389	1.47	39	<5	<2	<2	269	1.2	3	<2	32	22.90	.022	2	5	10.31	61<.01	5	.17 .01	.08	<2	<5	<1	<.01		
AU-121	1	489	46	24	4.7	9	234	6593	25.24	319	<5	<2	2	105	<.2	20	<2	11	3.85	.006	<1	14	2.65	29<.01	<3	.46<.01	.08	<2	<5	<1	.03		
AU-122	3	74	16	99	.9	9	35	6753	6.97	194	<5	<2	4	231	.8	6	<2	18	17.63	.011	1	7	7.74	126 .01	<3	.40 .01	.20	<2	<5	<1	.03		
RE AU-122	2	69	19	94	1.0	7	33	6410	6.47	186	<5	<2	3	215	.8	7	<2	16	16.77	.011	2	6	7.44	119 .01	<3	.35 .01	.18	<2	<5	<1	.03		
RRE AU-122	2	60	12	83	.8	8	30	6111	5.98	175	<5	<2	4	203	.6	7	3	16	16.09	.011	1	6	7.12	112 .01	<3	.33 .01	.18	<2	<5	<1	.03		
AU-123	1	205	20	18	3.2	13	111	8138	17.05	873	<5	<2	<2	89	<.2	30	<2	10	4.09	.011	<1	6	3.13	10<.01	<3	.08<.01	.03	2	<5	<1	.32		
AU-124	8	14	60	58	1.9	9	5	6613	2.12	305	<5	<2	2	312	.7	9	36	16	20.15	.014	1	4	8.01	38<.01	3	.09 .01	.05	<2	<5	<1	.19		
AU-125	4	26	38	46	.7	2	15	5447	3.71	401	5	<2	<2	326	.7	5	3	12	25.35	.015	1	3	6.25	26<.01	<3	.03<.01	.03	<2	<5	<1	.11		
AU-126	1	708	17	11	2.7	3	148	4060	25.07	7	<5	3	<2	21	<.2	6	933	16	1.71	.004	<1	<1	.76	8<.01	<3	.11<.01	.13	322	<5	<1	5.03		
AU-127	1	247	<3	38	1.3	3	90	2500	12.39	113	<5	<2	<2	18	<.2	4	17	6	1.10	.004	<1	8	.48	6<.01	<3	.09 .01	.08	106	<5	<1	.10		
AU-128	2	196	36	74	5.2	1	67	14413	13.32	756	<5	<2	4	118	.8	51	4	24	14.90	.040	<1	6	3.73	37<.01	<3	.05<.01	.03	2	<5	<1	.12		
AU-129	1028	14	6	92	<.3	2	1	1941	1.03	<2	<5	<2	<2	42	.5	<2	4	33	7.02	.024	2	<1	.85	15<.01	8	.24 .01	.01	367	<5	<1	<.01		
STANDARD C3/AU-1	28	70	35	166	5.9	39	13	763	3.54	56	22	4	20	33	25.3	20	27	88	.66	.094	19	180	.70	157 .10	21	2.02 .04	.19	23	<5	<1	3.31		

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS &gt; 1%, AG &gt; 30 PPM &amp; AU &gt; 1000 PPB

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 31 1997 DATE REPORT MAILED: APR 8 1997 SIGNED BY: D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA



GEOCHEMICAL/ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1477

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	AU	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm
AU-130	5	12	466	31270	1.5	13	10	408	3.61	18	<5	<2	<2	160	278.5	5	3	6	19.23	.012	5	13	8.66	154	.01	7	.48	.01	.26	<2	<5	1	.02
AU-131	2	5	8	707	<.3	3	2	1900	1.21	17	<5	<2	<2	192	6.1	<2	<2	4	23.32	.007	2	4	10.25	96	<.01	4	.12	<.01	.10	<2	<5	<1	<.01
AU-132	2	12	18	8890	.3	6	3	332	1.86	6	<5	<2	<2	170	82.7	<2	<2	4	22.01	.018	4	5	9.45	176	.01	7	.27	<.01	.17	<2	<5	<1	.02
AU-133	4	9	114	31226	1.3	8	5	644	1.45	3	<5	<2	<2	150	306.8	<2	2	7	19.83	.023	5	17	7.86	237	.02	16	.79	<.01	.29	<2	<5	1	.02
AU-134	15	12	724	34774	2.3	10	6	856	2.45	5	<5	<2	<2	190	311.2	<2	<2	5	20.57	.013	6	13	6.51	224	.01	10	.54	<.01	.23	<2	<5	2	.01
AU-135	3	6	38	537	<.3	1	3	13714	2.84	28	<5	<2	<2	126	4.9	<2	11	4	12.72	.008	1	7	5.13	27	<.01	<3	.09	<.01	.05	2	<5	<1	.02
AU-136	1	10	9	118	<.3	3	6	11030	2.32	21	<5	<2	<2	126	.9	<2	<2	6	19.75	.006	1	4	8.67	52	<.01	3	.14	<.01	.10	<2	<5	<1	<.01
AU-137	3	12	347	9565	.9	4	6	6160	2.02	10	<5	<2	<2	154	89.7	<2	7	10	20.88	.007	3	6	9.22	74	<.01	5	.21	.01	.15	<2	<5	<1	.04
AU-138	7	387	16	1229	.8	20	69	8051	11.70	<2	<5	<2	<2	43	12.1	5	458	10	5.73	.004	<1	8	2.98	11	<.01	<3	.16	<.01	.21	3	<5	<1	1.50
AU-139	2	66	28	1963	.5	6	25	7519	3.72	16	<5	<2	2	117	19.3	<2	6	21	20.79	.009	1	4	9.53	31	<.01	<3	.14	<.01	.11	3	<5	<1	.07
AU-140	1	10	42	147	1.6	6	12	2099	6.46	<2	13	2	15	10	<.2	3	247	23	.33	.005	1	7	3.34	48	.01	<3	2.08	.02	1.38	170	<5	<1	1.59
RE AU-140	1	10	40	148	1.5	6	12	2102	6.46	2	12	2	14	10	<.2	4	238	23	.31	.005	1	8	3.36	48	.01	3	2.08	.02	1.38	168	<5	<1	2.76
RRE AU-140	1	8	57	174	1.9	6	11	2154	6.43	<2	11	<2	12	11	.5	5	324	23	.42	.005	1	6	3.49	48	.01	<3	2.12	.02	1.41	138	<5	<1	1.54
AU-141	67	3	22	63	.9	3	3	1349	3.36	10	24	<2	18	17	<.2	2	43	4	.41	.003	3	10	1.33	15	<.01	5	.58	.03	.20	21	<5	<1	.21
AU-142	194	4	3	41	<.3	3	3	831	2.02	2	6	<2	4	11	<.2	<2	7	2	.28	.002	<1	15	.83	6	<.01	4	.19	<.01	.07	71	<5	<1	.04
AU-143	3	11	8	38	<.3	4	7	1611	3.88	37	11	<2	20	30	<.2	4	6	2	.71	.002	3	10	1.08	23	<.01	5	.44	.01	.22	66	<5	<1	.04
AU-144	1	7	4	19	.4	2	2	997	1.94	89	5	<2	7	42	<.2	2	7	1	.72	.001	<1	18	.51	7	<.01	4	.08	<.01	.08	6	<5	<1	.10
AU-145	1	13	525	6	34.8	4	1	172	.33	6	10	7	<2	5	1.5	80	1274	1	.12	.001	1	28	.06	2	<.01	<3	.02	<.01	.03	6	<5	<1	2.53
AU-146	100	5	36	10	2.4	3	1	993	.75	16	<5	<2	2	32	<.2	7	54	<1	.74	.001	<1	24	.32	5	<.01	<3	.05	<.01	.04	10	<5	<1	.07
AU-147	204	18	22	30	1.4	4	6	1656	3.88	40	5	<2	12	43	<.2	6	39	2	.94	.003	2	15	1.08	21	<.01	5	.66	<.01	.19	16	<5	<1	.15
AU-148	30	155	51	43	4.1	15	91	13796	17.62	191	5	<2	2	52	<.2	7	304	36	4.99	.025	<1	1	3.89	44	.01	<3	.65	.01	.71	313	5	<1	4.85
AU-149	2	78	13	64	.7	8	46	11493	10.58	83	<5	<2	2	109	.7	<2	26	57	10.17	.015	<1	4	7.84	106	.01	<3	1.09	<.01	1.36	6	<5	<1	.47
AU-150	2	21	12	112	.3	3	7	2679	1.25	67	<5	<2	<2	203	.9	6	3	9	22.66	.010	2	2	10.38	10	<.01	3	.03	<.01	.02	2	<5	1	.07
RE AU-150	2	19	6	119	<.3	3	7	2688	1.25	84	<5	<2	<2	203	.9	6	<2	9	22.66	.009	2	3	10.40	10	<.01	<3	.03	<.01	.01	<2	<5	<1	.02
RRE AU-150	2	21	8	134	.4	2	9	2921	1.37	81	<5	<2	<2	209	1.2	5	<2	10	23.25	.010	3	4	10.64	11	<.01	3	.03	<.01	.01	<2	<5	<1	.02
AU-151	1	8	178	472	.9	3	3	2943	1.12	111	<5	<2	<2	169	3.8	8	3	20	23.00	.022	3	4	10.03	17	<.01	3	.06	<.01	.04	<2	<5	<1	.01
AU-152	1	31	944	8546	2.3	10	10	5330	3.20	88	<5	<2	3	206	57.4	3	<2	10	20.34	.016	5	6	7.99	50	.01	<3	.56	.01	.16	<2	<5	<1	.01
AU-153	50	42	14	134	<.3	31	13	1664	2.96	21	<5	<2	8	85	.4	2	3	20	4.83	.067	18	28	.93	119	.07	8	1.78	.07	.31	30	<5	<1	<.01
STANDARD C3/AU-1	26	65	34	163	5.6	38	13	712	3.28	54	21	3	18	31	24.3	19	23	83	.61	.090	18	169	.65	151	.10	19	1.92	.05	.19	25	<5	1	3.36

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 1 1997 DATE REPORT MAILED: *Apr 8/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL/ASSAY CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1560

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



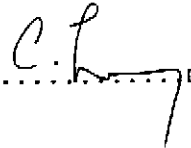
SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
LJH-164	1	18	14	191	<.3	27	11	108	1.66	2	<5	<2	9	71	1.7	<2	<2	21	1.92	.054	12	49	.98	46	.09	4	1.43	.07	.25	<2	<5	1	.01
LJH-165	2	793	123	76	1.4	38	26	337	5.05	2	<5	<2	7	141	.9	<2	<2	12	6.41	.053	11	22	.73	33	.03	8	1.54	.07	.37	121	<5	<1	<.01
LJH-166	462	3	5	45	<.3	2	<1	120	.11	<2	13	<2	12	158	<.2	2	<2	<1	2.28	.010	6	11	.02	32	<.01	7	.32	.04	.13	3	<5	1	<.01
LJH-167	452	24	36	66	<.3	2	1	2730	.98	<2	<5	<2	24	82	.4	<2	12	4	5.36	.027	10	5	.12	21	.01	6	1.81	.26	.16	12	<5	1	.02
LJH-168	23	3	6	30	<.3	3	1	699	.27	<2	7	<2	15	75	<.2	<2	4	1	2.59	.019	4	4	.07	18	<.01	<3	.59	.10	.14	<2	<5	<1	.02
LJH-169	11	7	11	34	<.3	1	<1	680	.26	2	<5	<2	16	144	.2	<2	<2	<1	3.80	.020	4	1	.13	23	<.01	5	.59	.05	.25	<2	<5	<1	.01
LJH-170	49	28	6	85	<.3	26	11	1403	2.39	4	7	<2	12	74	<.2	4	<2	36	2.04	.031	24	53	1.45	172	.15	3	1.30	.08	.61	<2	<5	<1	<.01
RE LJH-170	48	30	5	88	<.3	24	11	1430	2.45	2	<5	<2	12	75	.2	3	5	37	2.06	.034	23	53	1.47	178	.16	5	1.33	.08	.62	<2	<5	<1	<.01
RRE LJH-170	48	29	5	86	<.3	23	10	1414	2.41	4	<5	<2	12	74	<.2	2	<2	37	2.05	.030	23	53	1.45	186	.15	3	1.31	.08	.61	<2	<5	<1	.04
LJH-171	101	25	22	29	<.3	8	3	1022	1.09	109	14	<2	17	67	<.2	3	6	7	1.77	.015	11	17	.34	38	.02	7	.46	.05	.22	3	<5	1	<.01
LJH-172	17	63	5	70	.3	35	13	2247	3.26	44	<5	<2	8	197	.2	2	5	27	5.01	.121	29	41	.98	66	.07	8	1.86	.11	.28	3	<5	<1	.02
LJH-173	7	25	11	60	<.3	29	12	620	2.41	<2	<5	<2	9	87	.4	<2	2	32	2.21	.035	25	48	1.32	66	.19	3	1.60	.09	.27	2	<5	<1	<.01
STANDARD C3/AU-1	25	66	35	159	5.7	34	12	707	3.33	55	15	3	16	30	23.6	16	18	80	.60	.090	18	171	.64	146	.09	18	1.86	.04	.17	16	<5	2	3.19

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 4 1997

DATE REPORT MAILED:

April 12/97

SIGNED BY:  D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL/ASSAY CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1588

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	gm/t	
JU 2813 13-14.7	1	316	39	28	1.3	1	133	11414	29.98	541	<5	<2	6	37	1.1	7	<2	2	5.30	.004	<1	2	2.83	8<.01	<3	.02	.01	<.01	<2	5	<1	.01		
JU 3212 78.5-83.3	<1	966	33	45	1.1	4	54	6876	27.83	35	<5	<2	<2	45	.5	<2	<2	12	5.94	.019	<1	2	1.03	8<.01	<3	.03	.01	.02	<2	<5	<1	.96		
JU 3214 11-15	4	154	150	31	3.0	3	31	24901	11.83	3684	<5	<2	6	163	1.2	50	2	16	12.90	.036	<1	9	5.00	14<.01	<3	.11	<.01	.04	3	<5	<1	.31		
JU 3214 15-17	<1	404	127	43	2.2	11	142	2889	33.51	435	<5	<2	<2	48	<.2	8	<2	6	3.00	.011	<1	<1	1.39	7<.01	<3	.04	.01	.02	<2	<5	<1	.06		
JU 3214 40-48	3	1182	12	103	1.2	9	215	3579	33.83	33	<5	<2	<2	27	<.2	<2	43	12	2.54	.025	<1	<1	.94	17<.01	<3	.09	<.01	.01	225	<5	<1	1.64		
JU 3215 12-14	6	521	145	43	5.5	8	86	2268	20.65	1518	<5	<2	<2	49	.2	85	3	10	1.84	.026	<1	17	.90	8<.01	10	.09	.01	.03	5	<5	<1	.91		
JU 3215 66-68.5	1	396	38	67	1.5	3	69	7652	18.60	76	<5	<2	5	82	1.8	2	<2	10	10.12	.005	<1	9	6.01	13<.01	<3	.03	<.01	.01	3	<5	<1	.04		
JU 3215 68.5-73	<1	588	36	27	1.3	2	102	9800	23.29	39	<5	<2	<2	46	.7	<2	2	4	5.93	.002	<1	7	3.69	6<.01	<3	.01	.01	<.01	<2	<5	<1	<.01		
JU 3215 73-80.2	1	169	30	63	2.0	1	44	11442	9.92	135	<5	<2	3	92	1.1	2	2	10	13.91	.007	<1	4	7.07	8<.01	<3	.01	<.01	<.01	2	5	<1	.02		
JU 3215 80.2-83.8	<1	523	32	17	2.0	19	129	9999	29.63	90	<5	<2	4	50	.4	37	2	9	4.86	.010	<1	12	3.28	15 .01	<3	.24	.01	.01	<2	5	<1	.05		
JU 3215 83.8-87.7 not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JU 3220 2-3.2	1	67	191	22	2.3	5	41	692	16.48	1173	<5	<2	<2	15	<.2	7	<2	1	.84	.006	<1	12	.26	10<.01	8	.08	.01	.05	6	<5	<1	1.74		
JU 3220 28.5-34	<1	606	9	17	.7	1	121	7194	34.33	9	<5	<2	<2	61	<.2	<2	<2	14	6.49	.032	<1	<1	2.03	13<.01	<3	.04	<.01	.01	<2	<5	<1	<.01		
JU 3220 37-40	<1	685	8	12	.9	1	71	6183	32.61	12	<5	<2	<2	56	<.2	<2	<2	5	5.67	.013	<1	<1	1.72	7<.01	<3	.01	<.01	.02	<2	<5	<1	3.15		
RE JU 3220 37-40	<1	670	3	12	2.4	1	70	5938	31.08	7	6	5	3	52	<.2	<2	<2	5	5.43	.013	<1	<1	1.67	6<.01	<3	.01	<.01	<.01	<2	<5	<1	2.58		
RRE JU 3220 37-40	<1	653	<3	11	1.0	1	70	5791	31.82	11	5	<2	3	45	<.2	<2	<2	5	4.71	.012	<1	<1	1.64	6<.01	<3	.01	.01	<.01	<2	<5	<1	3.45		
JU 3265 4.5-6.1	1	939	89	795	2.3	14	79	8975	28.89	52	5	<2	3	68	5.7	2	5	17	8.37	.019	<1	3	4.26	15<.01	<3	.03	<.01	.02	21	<5	<1	.02		
JU 3265 31-36.5	<1	982	5	20	.9	2	232	6947	28.32	<2	<5	<2	2	49	<.2	<2	5	8	6.79	.016	<1	8	2.09	8<.01	<3	.03	.01	<.01	2	<5	<1	.02		
JU 3265 36.5-42	<1	687	10	13	.9	2	174	4674	29.58	2	8	<2	<2	32	<.2	<2	10	11	5.19	.018	<1	1	1.21	7<.01	<3	.05	<.01	<.01	<2	<5	<1	.14		
JU 3265 59-63.5	<1	453	77	17	3.4	2	83	6433	27.09	481	<5	3	2	39	<.2	13	<2	5	3.85	.028	<1	2	1.59	6<.01	3	.01	.01	.01	<2	<5	<1	2.74		
JU 3267 33.8-39	3	62	37	150	.5	4	7	1721	2.50	737	<5	<2	<2	203	1.2	11	2	13	25.40	.017	<1	5	12.09	14<.01	4	.03	.01	.02	3	<5	<1	.09		
JU 3267 39-44	<1	409	8	19	1.1	1	140	3721	25.36	110	5	<2	<2	111	.3	8	<2	9	13.89	.021	<1	5	1.21	20<.01	<3	.07	<.01	.03	<2	<5	<1	.01		
JU 3267 4-46.6	<1	823	14	15	.9	<1	114	4393	32.55	2	<5	<2	2	86	<.2	3	<2	7	7.01	.010	<1	<1	.75	12<.01	3	.04	<.01	.03	<2	<5	<1	.12		
STANDARD C3/AU-1	25	64	33	160	5.3	36	12	712	3.26	52	13	2	17	31	23.6	16	23	82	.63	.090	18	170	.64	146 .10	18	1.87	.04	.18	23	<5	<1	3.18		

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 7 1997 DATE REPORT MAILED: April 14/97 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL/ASSAY CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1596

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au** gm/t
LJH-174	32	207	<3	80	<.3	38	34	1210	3.71	6	<5	<2	11	73	.2	<2	<2	25	5.23	.078	20	43	1.25	49	.12	6	2.06	.09	.36	28	<5	<1	<.01
LJH-175	75	3	4	25	<.3	2	1	91	.20	<2	38	<2	14	129	<.2	<2	<2	1	1.53	.011	5	16	.03	62	<.01	6	.31	.07	.10	4	<5	<1	.01
LJH-176	104	3	6	27	<.3	3	1	199	.28	<2	22	<2	13	87	<.2	<2	<2	<1	1.57	.011	5	17	.03	28	<.01	4	.42	.09	.11	6	<5	<1	<.01
LJH-177	4	3	10	15	<.3	2	<1	217	.39	2	22	2	27	4	<.2	<2	2	1	.14	.002	10	16	.04	5	.01	3	.22	.07	.14	4	<5	<1	<.01
LJH-179 114.5-118.0	79	5	20	63	<.3	2	<1	149	.43	5	21	<2	23	6	.3	<2	<2	1	.17	.002	9	19	.07	7	<.01	3	.22	.07	.12	5	<5	<1	<.01
LJH-179 152.8-157.0	16	4	4	78	<.3	4	1	837	.48	<2	<5	<2	9	126	.6	3	<2	3	16.23	.051	12	8	.91	42	.07	12	.64	.02	.14	103	<5	<1	<.01
LJH-180	12	3	9	135	<.3	2	<1	388	.28	2	17	<2	13	9	.8	<2	3	1	.45	.005	5	16	.08	9	<.01	<3	.26	.06	.16	6	<5	<1	<.01
LJH-181	10	4	9	24	<.3	3	<1	436	.28	<2	16	<2	13	4	<.2	<2	<2	<1	.12	.003	3	16	.02	4	<.01	<3	.19	.06	.13	6	<5	<1	<.01
LJH-182	45	3	31	228	<.3	2	<1	274	.21	<2	15	<2	12	7	1.6	<2	<2	<1	.23	.004	4	17	.02	8	<.01	<3	.16	.07	.12	3	<5	<1	<.01
LJH-183	377	6	216	324	.8	3	1	1079	.51	6	13	<2	9	20	2.1	2	<2	<1	.94	.007	3	13	.05	24	<.01	<3	.20	.05	.13	10	<5	<1	<.01
LJH-184	284	14	105	144	1.5	3	2	2234	.96	4	45	2	12	66	.9	<2	27	<1	4.28	.014	4	11	.12	29	<.01	8	.55	.04	.28	56	<5	<1	<.01
RE LJH-184	287	15	109	147	1.6	3	2	2265	.98	4	45	2	11	67	.9	3	28	1	4.35	.014	4	11	.12	30	<.01	8	.56	.05	.28	55	<5	<1	<.01
RRE LJH-184	312	14	92	148	1.4	2	2	2213	.91	5	45	<2	11	70	1.0	3	26	<1	4.06	.015	3	9	.11	22	<.01	6	.43	.03	.22	54	<5	<1	<.01
LJH-185	4	1148	91	24	2.1	4	83	2739	21.84	37	<5	<2	6	33	<.2	10	<2	<1	6.47	.002	<1	6	.17	20	<.01	<3	.44	.02	.17	15	<5	<1	.04
LJH-186	176	3	8	41	<.3	3	1	841	.45	<2	20	<2	16	77	.2	<2	<2	1	2.22	.014	7	10	.56	61	<.01	9	.62	.05	.27	8	<5	<1	.01
LJH-187	29	3	20	66	<.3	2	1	799	.99	3	16	<2	2	372	.3	<2	<2	5	23.80	.008	4	5	11.03	435	.01	21	.37	.03	.20	14	<5	<1	<.01
LJH-188	28	26	7	56	<.3	2	1	1509	1.16	<2	<5	<2	3	132	.2	<2	<2	4	14.16	.010	6	5	7.31	138	.01	43	.48	.03	.19	48	<5	<1	.04
LJH-189	34	3	3	22	<.3	2	1	268	.28	<2	30	<2	14	41	<.2	<2	<2	1	1.07	.042	6	7	.38	190	.01	3	.48	.11	.16	5	<5	<1	<.01
STANDARD C3/AU-1	26	66	36	161	5.6	37	13	729	3.41	54	24	<2	19	31	24.6	17	25	83	.63	.094	18	170	.67	153	.10	20	1.93	.04	.18	22	<5	<1	3.37

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 8 1997

DATE REPORT MAILED: April 15/97

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL ANALYSIS CERTIFICATE

Sultan Minerals PROJECT JERSEY File # 97-1677

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	gm/t
LJH-190	125	2	16	9	<.3	2	<1	210	.18	<2	27	<2	8	4	<2	<2	<1	.15	.003	4	10	.02	12	<.01	4	.15	.05	.09	3	<5	1	<.01	
LJH-191	71	3	14	16	<.3	2	1	495	.39	<2	28	<2	15	9	<2	<2	5	.29	.004	9	15	.18	45	.02	3	.31	.05	.17	2	<5	1	<.01	
LJH-192	7	18	9	25	<.3	27	12	186	1.59	<2	5	<2	13	22	<2	2	<2	23	1.22	.031	16	39	.62	48	.18	4	.81	.03	.16	2	<5	1	<.01
LJH-193	34	2	10	7	<.3	2	1	468	.24	2	21	<2	13	8	<2	3	<2	2	.20	.003	5	13	.05	16	.01	<3	.18	.04	.11	3	<5	1	<.01
LJH-194	6	3	3	39	<.3	5	2	318	.40	<2	10	<2	14	26	<2	2	<2	6	1.88	.034	28	11	.40	27	.15	4	.40	.03	.06	<2	<5	1	<.01
LJH-195	69	12	6	39	<.3	15	8	368	1.28	2	7	<2	8	45	<2	<2	<2	15	1.56	.030	17	27	.40	23	.14	<3	1.38	.08	.16	<2	<5	1	<.01
LJH-196	5331	6	7	22	<.3	2	1	3299	.93	<2	<5	<2	10	19	.5	<2	5	8	3.00	.012	2	7	.09	5	.02	<3	1.05	.07	.02	5	<5	1	.01
LJH-197	3489	6	4	21	.4	1	<1	1260	.65	<2	11	<2	21	30	.3	2	4	4	1.99	.017	10	5	.13	11	.01	<3	.73	.13	.03	2	<5	2	.01
LJH-198	67	35	6	62	<.3	32	15	1285	3.00	5	<5	<2	9	77	.2	27	4	30	3.61	.083	24	45	.95	44	.12	6	1.99	.07	.33	14	<5	<1	.05
LJH-199	82	101	<3	59	.4	5	8	2289	2.62	4	6	<2	<2	46	<2	<2	2	9	7.69	.030	4	4	4.63	14	.01	15	.33	.01	.14	230	<5	<1	<.01
LJH-200	74	53	4	111	<.3	1	1	2436	2.86	2	<5	<2	2	138	.6	<2	<2	16	12.94	.057	4	4	6.36	22	.01	16	.25	.01	.07	281	<5	1	<.01
RE LJH-200	72	50	<3	101	.4	3	3	2285	2.72	4	<5	<2	2	133	.3	<2	<2	15	11.98	.058	3	3	6.11	14	.01	16	.23	.01	.07	285	<5	1	<.01
RRE LJH-200	71	51	8	108	.3	<1	4	2398	2.67	3	9	<2	2	142	.3	<2	<2	15	13.27	.059	4	3	6.42	30	.01	14	.24	.02	.08	292	<5	<1	<.01
LJH-201	30	62	23	44	.3	13	10	2061	3.68	<2	8	<2	8	62	<2	<2	212	20	3.79	.106	16	14	.71	25	.02	<3	1.07	.05	.21	487	<5	<1	.09
LJH-202	2	110	<3	66	.3	19	17	1957	4.56	2	<5	<2	3	29	<2	<2	51	10	2.83	.085	10	6	.42	10	.02	4	.57	.04	.03	166	<5	1	.13
LJH-203	150	114	9	111	.5	28	16	2984	4.84	<2	<5	<2	8	46	<2	<2	19	30	4.25	.106	29	36	.99	15	.08	<3	1.86	.10	.05	166	<5	<1	.05
STANDARD C3/AU-1	26	65	30	156	5.7	34	11	722	3.36	53	29	3	17	30	22.7	16	27	80	.61	.088	19	167	.65	153	.10	20	1.87	.04	.17	17	<5	1	3.30

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 11 1997

DATE REPORT MAILED:

April 22/97

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## ASSAY CERTIFICATE



Sultan Minerals PROJECT JERSEY File # 97-1677R  
 P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#

MO  
%

LJH-196	.536
LJH-197	.388
RE LJH-197	.367

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.  
 - SAMPLE TYPE: CORE PULP  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAY 6 1997 DATE REPORT MAILED: *May 12/97* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

AA  
LL

## ASSAY CERTIFICATE

AA  
LL

Sultan Minerals File # 97-5785

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	MO %	CU %	PB %	Zn % OZ/T	AG %	NI %	CO %	MN %	FE %	AS %	U %	TH %	CD %	SB %	BI %	Pb* %	Zn* %	SAMPLE lb.
JERSEY OX 1	.001	.013	4.22	1.77	.20	.010	.002	.11	31.35	.02	<.01	<.01	.010	.010	<.01	2.39	.35	19
JERSEY OX 2	.002	.011	2.68	1.51	.22	.009	.002	.11	33.53	.02	<.01	<.01	.010	.010	<.01	1.32	.28	19
JERSEY OX 3	.002	.010	2.14	.88	.18	.010	.002	.06	31.16	.02	<.01	<.01	<.010	.010	<.01	.86	.15	15
JERSEY OX 4	.002	.007	2.42	1.02	.19	.010	.002	.06	32.46	.03	<.01	<.01	<.010	.010	<.01	.88	.15	12
JERSEY OX 5	.002	.009	2.08	.91	.08	.008	.001	.06	30.25	.03	.01	<.01	<.010	.010	<.01	.83	.17	12
JERSEY OX 6	.002	.009	2.38	1.14	.08	.011	.001	.06	33.90	.03	.01	<.01	<.010	.010	<.01	.93	.19	14
RE JERSEY OX 6	.002	.009	2.39	1.15	.12	.009	.002	.06	34.25	.03	<.01	<.01	<.010	.010	<.01	.92	.18	-
JERSEY OX 7	.002	.010	3.41	1.58	.26	.008	.002	.08	28.32	.03	<.01	<.01	.010	.010	<.01	1.73	.32	9
JERSEY OX 8	.001	.011	3.49	1.73	.19	.009	.002	.10	30.10	.02	<.01	<.01	.010	.010	<.01	2.00	.43	15
STANDARD R-1	.090	.850	1.34	2.37	2.98	.025	.025	.08	6.66	.89	<.01	.01	.050	.160	.03	-	-	-

.250 GM SAMPLE DIGESTED IN 75 ML AQUA - REGIA, DILUTE TO 250 ML, ANALYSIS BY ICP.

PB\* &amp; ZN\* BY AMMONIUM ACETATE.

- SAMPLE TYPE: ROCK

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 2 1997 DATE REPORT MAILED: Oct 14/97 SIGNED BY: C. Leong D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals File # 97-5928

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Ed Lawrence

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppb
BJ 1	9	56	18305	3290	31.7	45	1	652	5.57	32639	50	<2	<2	155	36.8	509	<3	6	23.88	.117	2	8	.89	79<.01	16	.04	.01	.02	<2	<5	<1	74	
BJ 2	1	5	1980	836	1.7	12	1	154	.36	468	<8	<2	<2	189	13.1	98	<3	5	30.58	.040	1	3	2.63	18<.01	3	.07<.01	.02	<2	<5	<1	4		
BJ 3	1	4	216	233	.5	6	1	94	.45	104	<8	<2	2	139	2.6	16	<3	3	30.90	.052	5	2	.79	23<.01	<3	.09<.01	.07	<2	<5	<1	3		
BJ 4	2	24	217	2599	.6	153	7	387	1.19	51	<8	<2	3	73	10.5	15	<3	33	18.41	.135	8	11	.76	115 .02	<3	.66 .01	.11	<2	<5	<1	<1		
BJ 5	2	59	985	3448	1.0	295	11	413	2.91	165	<8	<2	7	37	5.8	80	<3	77	3.32	.208	24	29	.67	205 .06	7	1.97 .02	.19	2	<5	<1	7		
BJ 6	8	90	5505	3697	3.3	229	11	920	17.70	19246	8	<2	2	35	36.6	1169	<3	275	2.58	.165	20	56	.33	184 .04	27	1.50 .01	.11	43	<5	<1	43		
BJ 7	27	246	10688	6581	4.7	880	33	5652	10.82	11418	<8	<2	3	43	41.0	983	<3	467	5.09	.171	21	60	.54	434 .05	21	1.80 .01	.16	28	<5	<1	1550		
BJ 8	13	185	19382	11743	5.4	337	12	1154	8.70	13928	11	<2	3	67	114.6	586	<3	357	7.67	.232	19	36	1.06	124 .04	20	1.61 .01	.12	13	<5	<1	510		
RE BJ 8	13	188	19571	12006	5.5	346	13	1185	8.93	14341	14	<2	4	68	117.7	596	<3	366	7.99	.241	19	37	1.09	126 .04	22	1.64 .01	.13	15	<5	<1	451		
BJ 9	1	22	996	518	1.0	19	3	545	1.90	2677	<8	<2	<2	235	10.6	31	<3	23	25.56	.113	4	9	1.94	59<.01	3	.09<.01	.04	<2	<5	<1	37		
BJ 10	<1	3	312	146	.3	5	1	84	.15	86	<8	<2	<2	193	2.2	7	<3	5	29.75	.043	2	3	3.26	17<.01	<3	.04<.01	.02	<2	<5	<1	3		
DICK 1	2	114	54	218	1.2	50	10	191	2.15	43	<8	<2	7	43	3.1	3	<3	366	4.31	.976	29	53	1.05	90 .09	5	1.52 .01	.19	9	<5	<1	1		
STANDARD C3/AU-R	26	66	33	166	5.8	37	12	734	3.34	54	20	4	18	30	23.5	17	24	83	.59	.084	17	169	.57	149 .10	23	1.85 .04	.16	21	<5	1	544		
STANDARD G-1	2	4	<3	50	<.3	9	5	583	2.18	<2	<8	<2	3	69	<.2	<3	<3	44	.61	.076	6	90	.65	269 .16	<3	1.04 .08	.53	<2	<5	1	<1		

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 7 1997

DATE REPORT MAILED:

Oct 17/97

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Assay in progress for Pb, Zn, As > 1%  
 Au > 300 ppb

## ASSAY CERTIFICATE



Sultan Minerals File # 97-5928R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	PB %	Zn %	AS %	Au** gm/t
BJ 1	5.93	-	3.13	-
BJ 6	-	-	2.40	-
BJ 7	1.32	-	1.24	1.88
BJ 8	7.00	1.22	1.55	.63
RE BJ 8	7.06	1.22	1.55	.63

.250 GM SAMPLE DIGESTED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.  
 - SAMPLE TYPE: ROCK PULP AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 27 1997

DATE REPORT MAILED:

Oct 29/97

SIGNED BY:

D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals File # 97-5929

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Ed Lawrence

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	
M 1	2	2326	6666	71979	126.1	10	26	401	10.58	5271	<8	<2	<2	2	608.3	265	<3	9	.05	.012	<1	5	.11	1<.01	<3	.31<.01	.08	<2	<5	<1		
MARILYN 2	12	1177	17012	35546	50.5	8	13	329	4.93	1966	<8	<2	<2	8	335.6	30	14	7	.07	.028	2	8	.03	21<.01	<3	.31<.01	.17	7	<5	<1		
M 3	29	167	19387	815	67.0	10	13	58	6.25	5317	<8	<2	<2	9	4.0	10	3	35	.05	.048	2	12	.04	21<.01	<3	1.27	.01	.26	2	<5	<1	
RE M 3	26	150	17425	750	60.8	9	11	51	5.64	4864	<8	<2	<2	6	3.4	10	<3	31	.03	.044	2	10	.03	19<.01	<3	1.10	.01	.23	<2	<5	<1	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 7 1997 DATE REPORT MAILED: Oct 24/97 SIGNED BY: *C. Leong* .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS



ASSAY CERTIFICATE



Sultan Minerals File # 97-5929  
 P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Ed Lawrence

SAMPLE#	Cu %	Pb %	Zn %	Ag gm/t
M 1	.229	25.90	7.75	379.3
MARILYN 2	.114	4.92	3.46	51.5
M 3	.016	2.47	.09	70.1
RE M 3	.016	2.47	.09	69.1

1 GM SAMPLE DIGESTED IN 50 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.  
 - SAMPLE TYPE: ROCK  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 7 1997 DATE REPORT MAILED: *Oct 24/97* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Sultan Minerals PROJECT LOWER JERSEY File # 97-5945

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Ed Lawrence

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm
B 1	<1	8	16573	99999	18.6	4	6	172	.77	31	<8	<2	<2	133	1191.1	36	<3	3	10.06	.008	1	<1	3.57	28<.01	<3	.13<.01	.10	<2	<5	8		
B 2	1	13	14467	99999	29.0	13	7	146	4.95	36	11	<2	<2	42	1121.0	72	3	4	3.14	.007	<1	<1	2.04	1<.01	5	.04<.01	.03	2	<5	7		
B 3	<1	13	17145	99999	6.5	4	5	162	.98	35	<8	<2	<2	216	1180.0	19	<3	2	10.37	.007	2	<1	3.41	41<.01	<3	.06<.01	.05	<2	<5	6		
RE B 3	<1	12	15749	99999	6.0	3	5	148	.89	36	<8	<2	<2	194	1153.4	18	<3	2	9.21	.007	2	<1	3.13	38<.01	<3	.06<.01	.05	<2	<5	6		

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 8 1997 DATE REPORT MAILED: *Oct 16/97* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

*Assay Pb & Zn in progress*  
*\* Assay Cd recommended*

ASSAY CERTIFICATE



Sultan Minerals PROJECT LOWER JERSEY File # 97-5945R  
 P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	PB %	Zn %	CD %
B 1	5.30	23.42	.194
B 2	22.50	20.66	.171
B 3	2.77	24.05	.198

.250 GM SAMPLE DIGESTED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.  
 - SAMPLE TYPE: ROCK PULP

DATE RECEIVED: OCT 17 1997 DATE REPORT MAILED: *Oct 27/97* SIGNED BY: *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS



ASSAY CERTIFICATE



Sultan Minerals PROJECT LOWER JERSEY File # 97-5945R2  
 P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Ag gm/t
B 1	14.5
B 2	33.1
RE B 2	32.5

1 GM SAMPLE DIGESTED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.  
 - SAMPLE TYPE: ROCK PULP  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 31 1997

DATE REPORT MAILED: *Nov 7/97*

SIGNED BY: *C. Leong* TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



ASSAY CERTIFICATE



Sultan Minerals PROJECT LOWER JERSEY File # 97-5950R

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5

SAMPLE#	Zn %
LJ 97-9 31.8-32.3	1.50
LJ 97-9 66.55-66.85	1.93
RE LJ 97-9 66.55-66.85	1.81

1.000 GM SAMPLE DIGESTED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: CORE PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 17 1997

DATE REPORT MAILED:

*Oct 27/97*

SIGNED BY.....

D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEMICAL/ASSAY CERTIFICATE



Sultan Minerals PROJECT ROZAN EXAM File # 97-6435

P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Perry Grunenberg

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Ag**	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	gm/t	gm/t
ROZ-1	1	7	<3	9	<.3	6	2	207	.70	<2	<8	<2	2	19	<.2	<3	<3	10	.08	.018	5	20	.17	26	.02	<3	.28	.02	.04	11	<.3	<.01
ROZ-2	132	9	57	3	2.7	4	2	62	2.78	3	<8	<2	<2	15	.2	<3	45	4	<.01	.013	7	18	.01	19	<.01	<3	.08	.01	.04	15	3.1	1.06
ROZ-3	2	10	3	48	<.3	6	8	730	2.50	<2	<8	<2	3	55	<.2	<3	<3	55	1.64	.077	6	16	.68	49	.12	<3	.97	.07	.54	5	<.3	<.01
ROZ-4	3	5	10	1	1.1	4	2	136	2.61	3	<8	8	2	9	.2	<3	27	6	.02	.027	6	16	.09	21	.01	12	.33	.02	.08	259	1.0	7.90
L2+50S 5+00E	<1	3	<3	28	<.3	3	3	391	1.63	<2	<8	<2	4	30	<.2	<3	<3	33	.25	.054	10	12	.37	33	.06	<3	.59	.04	.14	10	<.3	.07
GEOCH. E. RED RIDGE	1	3	5	33	<.3	4	3	415	1.56	<2	<8	<2	4	47	<.2	<3	<3	32	.33	.050	10	13	.35	26	.08	<3	.60	.05	.11	9	<.3	<.01
RE GEOCH. E. RED RIDGE	1	3	<3	29	<.3	4	3	390	1.47	<2	<8	<2	4	44	<.2	<3	<3	29	.31	.046	10	12	.33	25	.07	<3	.56	.05	.10	8	<.3	.02

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS &gt; 1%, AG &gt; 30 PPM &amp; AU &gt; 1000 PPB

- SAMPLE TYPE: ROCK AG\*\* + AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 5 1997

DATE REPORT MAILED:

Nov 6/97

SIGNED BY.....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE

Sultan Minerals File # 97-6550

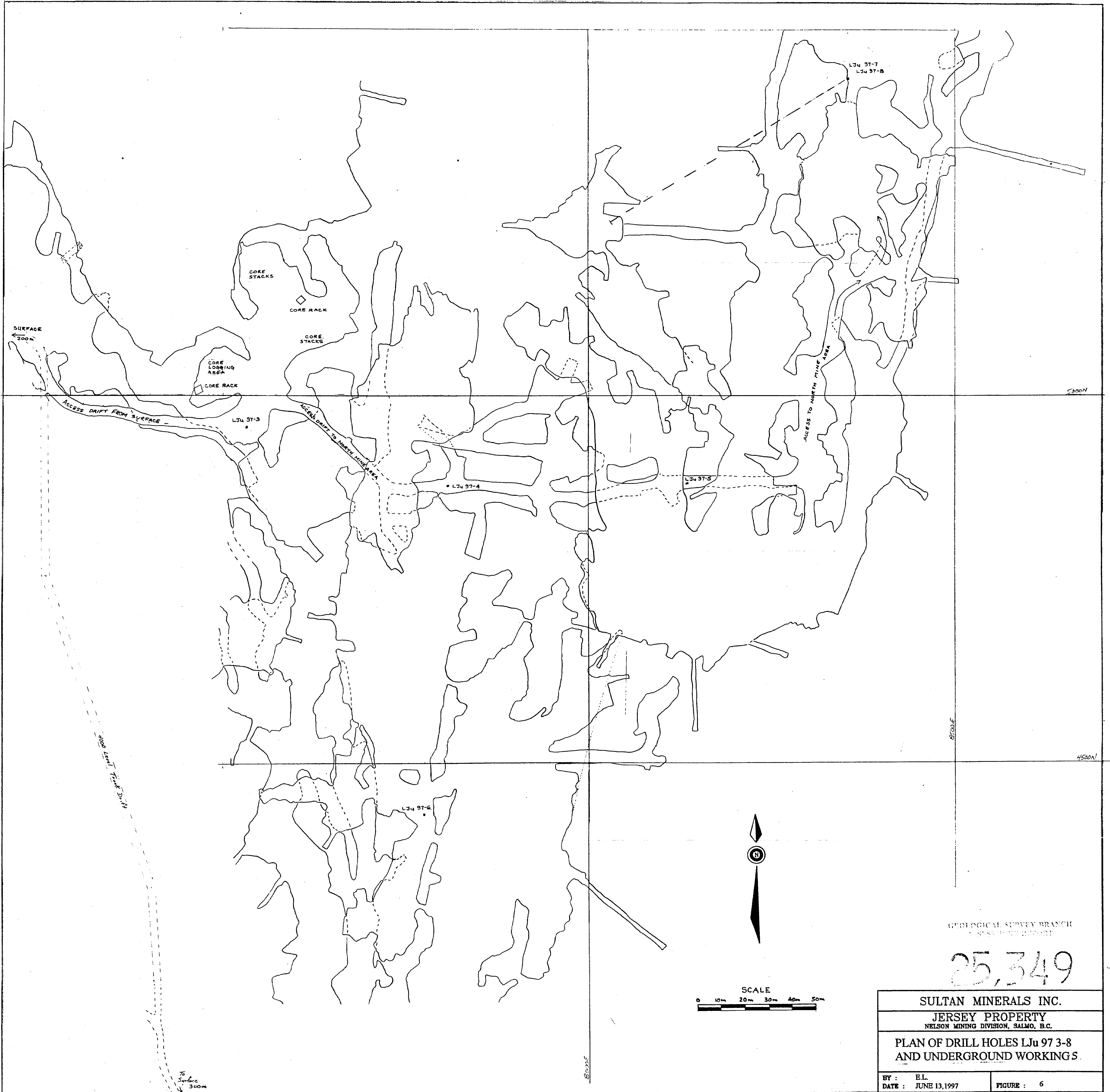
P.O. Box 10435, 1610 - 77, Vancouver BC V7Y 1K5 Submitted by: Jack Denny

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L51+50N 33+00E	4	165	20	1433	2.4	135	15	318	2.53	13	<8	<2	6	30	11.2	5	<3	196	.29	.178	14	28	1.30	265	.13	4	3.78	.02	.10	<2	1
L51+50N 33+25E	4	89	21	1095	1.2	116	13	324	2.70	18	<8	<2	6	36	12.8	5	<3	169	.32	.336	14	26	.96	603	.13	3	3.39	.02	.11	<2	<1
L51+50N 33+50E	2	38	17	554	5.0	47	7	193	1.95	9	<8	<2	4	63	10.3	5	<3	127	.61	.585	7	20	.48	733	.13	3	3.16	.05	.09	<2	2
L51+50N 33+75E	4	178	25	1626	5.1	145	19	239	3.43	11	<8	<2	5	55	9.2	11	<3	407	.72	.401	9	48	1.93	204	.14	3	4.59	.02	.11	<2	3
L51+50N 34+00E	2	47	14	1140	1.0	69	9	335	2.44	11	<8	<2	5	62	12.6	4	<3	141	.63	.703	12	26	.48	1220	.11	3	3.23	.03	.13	<2	<1
L50+50N 33+00E	3	64	22	1168	.6	94	12	279	2.50	14	<8	<2	6	28	14.2	5	<3	158	.40	.359	10	28	.74	355	.15	3	4.29	.03	.11	<2	2
L50+50N 33+25E	3	80	33	1490	2.1	118	17	428	2.88	12	<8	<2	5	40	13.5	5	<3	272	.66	.496	11	44	1.24	564	.11	<3	3.59	.01	.15	<2	1
L50+50N 33+50E	2	52	24	1699	.4	137	18	976	2.75	5	<8	<2	5	36	31.4	4	<3	152	.47	.412	11	40	1.08	668	.13	3	3.02	.02	.15	<2	2
RE L50+50N 33+50E	3	53	25	1684	.5	139	18	882	2.75	6	<8	<2	4	35	28.1	4	<3	153	.46	.412	10	40	1.09	655	.13	<3	3.05	.02	.15	<2	1
L50+50N 33+75E	3	61	27	1509	1.6	112	15	357	2.68	8	<8	<2	6	27	25.3	5	<3	217	.44	.334	13	36	1.00	280	.12	3	3.80	.02	.13	<2	1
L50+50N 34+00E	5	84	17	2257	2.0	153	16	385	2.64	6	<8	<2	5	29	26.6	<3	<3	277	.63	.180	13	40	1.22	191	.11	4	3.45	.02	.13	<2	1
STANDARD C3/AU-S	25	64	33	170	5.6	37	12	750	3.43	56	20	<2	20	28	23.2	18	20	80	.54	.085	20	177	.60	146	.10	18	1.94	.04	.16	18	47
STANDARD G-1	3	3	3	49	<.3	10	5	586	2.24	<2	<8	<2	4	81	<.2	<3	<3	43	.67	.075	9	113	.64	254	.16	3	1.10	.08	.50	<2	<1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 - SAMPLE TYPE: SOIL AU\* - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 5 1997 DATE REPORT MAILED: Nov 12/97 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





GEOLOGICAL SURVEY BRANCH  
 TECHNICAL REPORT

25,349

SULTAN MINERALS INC.	
JERSEY PROPERTY NELSON MINING DIVISION, SALMO, B.C.	
PLAN OF DRILL HOLES LJ4 97 3-8 AND UNDERGROUND WORKINGS	
BY : E.L.	FIGURE : 6
DATE : JUNE 13, 1997	